

74
M 53
96-37

1021

96-37
M 53
96-37

ATLANTIC TUNA

GOVERNMENT

Storage

HEARINGS
BEFORE THE
SUBCOMMITTEE ON FISHERIES AND WILDLIFE
CONSERVATION AND THE ENVIRONMENT
AND THE
COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES
NINETY-SIXTH CONGRESS



SECOND SESSION
ON
ATLANTIC TUNA CONVENTION AUTHORIZATION
AND OVERSIGHT—H.R. 6310
A BILL TO AUTHORIZE APPROPRIATIONS FOR THE ATLANTIC
TUNA CONVENTION ACT FOR FISCAL YEARS 1981, 1982, AND 1983
MARCH 6, 1980

ATLANTIC BLUEFIN TUNA CONSERVATION
OVERSIGHT
MAY 1, 1980

Serial No. 96-37

Printed for the use of the Committee on Merchant Marine and Fisheries

DOCUMENTS



NOV 20 1980

U.S. GOVERNMENT PRINTING OFFICE
KANSAS STATE UNIVERSITY
WASHINGTON : 1980

66-489 O

COMMITTEE ON MERCHANT MARINE AND FISHERIES

JOHN M. MURPHY, New York, *Chairman*

THOMAS L. ASHLEY, Ohio
 JOHN D. DINGELL, Michigan
 WALTER B. JONES, North Carolina
 MARIO BIAGGI, New York
 GLENN M. ANDERSON, California
 E (KIKI) DE LA GARZA, Texas
 JOHN B. BREAUX, Louisiana
 GERRY E. STUDDS, Massachusetts
 DAVID R. BOWEN, Mississippi
 CARROLL HUBBARD, Jr., Kentucky
 DON BONKER, Washington
 LES AU COIN, Oregon
 NORMAN E. D'AMOURS, New Hampshire
 JAMES L. OBERSTAR, Minnesota
 WILLIAM J. HUGHES, New Jersey
 BARBARA A. MIKULSKI, Maryland
 DAVID E. BONIOR, Michigan
 DANIEL K. AKAKA, Hawaii
 MICHAEL OZZIE MYERS, Pennsylvania
 JOE WYATT, Texas
 MIKE LOWRY, Washington
 EARL HUTTO, Florida
 EDWARD J. STACK, Florida
 BRIAN DONNELLY, Massachusetts

PAUL N. McCLOSKEY, Jr., California
 GENE SNYDER, Kentucky
 EDWIN B. FORSYTHE, New Jersey
 DAVID C. TREEN, Louisiana¹
 JOEL PRITCHARD, Washington
 DON YOUNG, Alaska
 ROBERT E. BAUMAN, Maryland
 NORMAN F. LENT, New York
 DAVID F. EMERY, Maine
 ROBERT K. DORNAN, California
 THOMAS B. EVANS, Jr., Delaware
 PAUL S. TRIBLE, Jr., Virginia
 ROBERT W. DAVIS, Michigan
 WILLIAM CARNEY, New York
 MELVIN H. EVANS, Virgin Islands
 BOB LIVINGSTON, Louisiana²

CARL L. PERIAN, *Chief of Staff*

LAWRENCE J. O'BRIEN, Jr., *Chief Counsel*

JULIA P. PERIAN, *Chief Clerk/Administrator*

JACK E. SANDS, *Minority Counsel*

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

JOHN B. BREAUX, Louisiana, *Chairman*

JOHN D. DINGELL, Michigan
 DAVID R. BOWEN, Mississippi
 DON BONKER, Washington
 JAMES L. OBERSTAR, Minnesota
 WILLIAM J. HUGHES, New Jersey
 DAVID E. BONIOR, Michigan
 MIKE LOWRY, Washington
 EARL HUTTO, Florida
 GLENN M. ANDERSON, California
 E (KIKI) DE LA GARZA, Texas
 GERRY E. STUDDS, Massachusetts
 LES AU COIN, Oregon
 NORMAN E. D'AMOURS, New Hampshire
 DANIEL K. AKAKA, Hawaii
 JOE WYATT, Texas
 EDWARD J. STACK, Florida
 BRIAN DONNELLY, Massachusetts
 JOHN M. MURPHY, New York
 (Ex Officio)

EDWIN B. FORSYTHE, New Jersey
 JOEL PRITCHARD, Washington
 DON YOUNG, Alaska
 ROBERT E. BAUMAN, Maryland
 DAVID F. EMERY, Maine
 THOMAS B. EVANS, Jr., Delaware
 PAUL S. TRIBLE, Jr., Virginia
 ROBERT W. DAVIS, Michigan
 WILLIAM CARNEY, New York
 MELVIN H. EVANS, Virgin Islands
 PAUL N. McCLOSKEY, Jr., California
 (Ex Officio)

G. WAYNE SMITH, *Staff Director*

ROBERT D. THORNTON, *Counsel*

NORMA MOSES, *Chief Clerk*

GEORGE MANNINA, *Minority Professional Staff*

¹ Resigned March 10, 1980.

² Elected to committee March 10, 1980.

CONTENTS

ATLANTIC TUNA CONVENTION AUTHORIZATION AND OVERSIGHT

Hearing held—	Page
March 6, 1980.....	1
Text of—H.R. 6310.....	3
Report from—	
Department of State.....	4
Statement of—	
Blondin, Carmen, Director, Office of International Fisheries Affairs, National Marine Fisheries Service, Department of Commerce.....	17
Prepared statement.....	19
Bowland, Jack C., national representative, U.S. Tuna Foundation.....	36
Prepared statement.....	36
Busby, Morris D., Acting Deputy Assistant Secretary for Oceans and Fisheries Affairs, Department of State.....	17
Prepared statement.....	18
Corrada, Hon. Baltasar, Resident Commissioner of Puerto Rico (prepared statement).....	44
Madera, Jose R., administration, Puerto Rico Economic Development Administration (prepared statement).....	45
Steele, George, representative, American Tuna Boat Association.....	36
Weld, Christopher M., executive director of the National Coalition for Marine Conservation, Inc.....	12
Prepared statement.....	4

ATLANTIC BLUEFIN TUNA CONSERVATION OVERSIGHT

Hearing held—	
May 1, 1980.....	51
Statement of—	
Alverson, Frank, vice president and chief scientist, Living Marine Resources, Inc.....	118
Prepared statement.....	126
Blondin, Carmen, J., U.S. Commissioner to International Commission for the Conservation of Atlantic Tunas.....	86
Broadhead, Gordon, chairman, U.S. Advisory Committee to ICCAT.....	118
Bryson, John, executive director, Mid-Atlantic Fishery Management Council.....	155
Prepared statement.....	157
Burney, David, general counsel, U.S. Tuna Foundation.....	118
Prepared statement.....	119
Busby, Morris, Acting Deputy Assistant Secretary for Oceans and Fisheries Affairs, Department of State.....	68
Carlton, Frank E., U.S. Commissioner to International Commission for the Conservation of Atlantic Tunas (ICCAT).....	86
Prepared statement.....	96
Cary, Harold, U.S. Commissioner to International Commission for the Conservation of Atlantic Tunas (ICCAT).....	86
Prepared statement.....	112
Edney, Steve, president, United Cannery and Industrial Workers of the Pacific, SIU, AFL-CIO (prepared statement).....	138
Felando, August, president, American Tunaboat Association and member of U.S. Advisory Committee to ICCAT.....	118
Prepared statement.....	141

IV

	Page
Statement of—Continued	
Figurelli, Louis, president, Natural Resources Protective Association.....	55
Fyrberg, David, Tri-Coastal Seafood Corp., Inc	155
Leitzell, Terry, Assistant Administrator for Fisheries, National Marine Fisheries Service, NOAA, Department of Commerce.....	68
Prepared statement.....	72
Macnow, Alan, Tele-Press Associates, Public Relations Counsel to the Japan Fisheries Association	175
Prepared statement.....	175
Mather, Frank J. III, scientist emeritus, Woods Hole Oceanographic Institute	155
Simons, Scott, Long Island Fishermen Magazine	55
Sloan, Stephen, director, American League of Anglers	55
Somers, Fred, United Cannery and Industrial Workers of the Pacific AFL-CIO	118
Sousa, Capt. George, director, American Tunaboat Association	118
Steele, George, Washington representative of the American Tunaboat Association	118
Additional material supplied—	
Alverson, Frank:	
Comments on the Testimony of Christopher H. Weld.....	134
ICCAT Working Document by Susan Brunenmeister	131
Southwest Fisheries Center, National Marine Fisheries Service by Gary T. Sakagawa	132
Felando, August:	
Historical Fishery Statistics	150
Review of Certain Major Fisheries.....	149
Tuna and the Fisheries of the United States (1979 statistics)	148
Figurelli, Louis:	
Article: "U.S. Fishing Concerned With 200-mile Limit" by Bob Duffy..	62
Petition: Help Protect the Bluefin Tuna.....	61
Leitzell, Terry: Reply to Question	74
Mather, Frank J. III: A Preliminary Note on Migratory Tendencies and Distributional Patterns of Atlantic Bluefin Tuna Based on Recently Acquired and Cumulative Tagging Results	166
Communications submitted—	
Bowland, Jack C.: Letter of March 11, 1980, to Hon. Gerry E. Studds.....	107
Letter of March 18, 1980, to Hon. Thomas B. Evans, Jr	107
Cardoso, J. C. Esteves: Letter of March 19, 1980, to O. Rodriguez Martin ..	104
Cary, Harold F.: Letter of March 19, 1980, to Members, U.S. House of Representatives, Merchant Marine and Fisheries Committee	107
Corrada, Hon. Baltasar: Letter of March 24, 1980, to Hon. John M. Murphy	54
Figurelli, Louis:	
Letter of March 18, 1980, to Hon. John M. Murphy	59
Letter of April 16, 1980, to Hon. John M. Murphy	57

ATLANTIC TUNA CONVENTION AUTHORIZATION AND OVERSIGHT

THURSDAY, MARCH 6, 1980

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, COMMITTEE ON MERCHANT MARINE AND FISHERIES,

Washington, D.C.

The subcommittee met, pursuant to recess, at 11:10 a.m. in room 1334 Longworth House Office Building, Hon. John B. Breaux (chairman) presiding.

Present: Representatives Breaux (presiding), Studds, Oberstar, Forsythe, Evans, and Carney.

Staff present: G. Wayne Smith, Theodore Kronmiller, Ned Everett, George Mannina, and Geraldine Fitzgerald.

Mr. BREAUX. The subcommittee will please be in order.

This morning the Subcommittee on Fisheries and Wildlife Conservation and the Environment will receive testimony on H.R. 6310, a bill to authorize appropriations for the Atlantic Tuna Convention Act for the fiscal years 1981, 1982, and 1983. The act implements the International Convention for the Conservation of Atlantic Tunas (ICCAT).

I strongly support the utilization of international measures to conserve and manage tuna. Unilateral management is inherently inadequate to deal effectively with these species that migrate through the jurisdictions of many nations and into the seas beyond. Therefore, if in any given case, international measures are not entirely satisfactory, they should be improved, not abandoned in favor of a unilateral approach.

I view very seriously the fact that tuna fishing by the Japanese long-line fleets in the U.S. 200-mile zone has resulted in an unacceptable mortality of billfish. International measures would be useful, but we have the legal ability to deal with that problem through fishery management plans, and I am pleased that progress is being achieved in their development. Until they are completed, the Japanese tuna fleets would be well advised to reduce voluntarily their impact on billfish. While I would not pretend that failure by Japan to cooperate with the United States in this manner would result in a reversal of the U.S. juridical position on tuna, I would think that allocations to Japan of surplus fish that are subject to U.S. jurisdiction might be affected.

I support the reauthorization of the Atlantic Tunas Convention Act. However, I expect that if deficiencies exist in Atlantic tuna conservation measures, the administration will make every effort to achieve the needed improvements. Likewise, I anticipate that

the billfish issue will be settled satisfactorily through the cooperative work of the Councils, the National Marine Fisheries Service and the Department of State and, until that is accomplished, I advise the Japanese to play a constructive role on a voluntary basis.

[The bill and report follows:]

96TH CONGRESS
2D SESSION

H. R. 6310

To authorize appropriations for fiscal years 1981, 1982, and 1983 to carry out the Atlantic Tunas Convention Act of 1975.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 28, 1980

Mr. MURPHY of New York (for himself, Mr. BREAUX, and Mr. FORSYTHE) introduced the following bill; which was referred to the Committee on Merchant Marine and Fisheries

A BILL

To authorize appropriations for fiscal years 1981, 1982, and 1983 to carry out the Atlantic Tunas Convention Act of 1975.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*
- 3 That section 10 of the Atlantic Tunas Convention Act of
- 4 1975 (16 U.S.C. 971h) is amended by striking out "and
- 5 1980" and inserting in lieu thereof "1980, 1981, 1982, and
- 6 1983".

DEPARTMENT OF STATE,
Washington, D.C., March 20, 1980.

HON. JOHN M. MURPHY,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives.

DEAR MR. CHAIRMAN: This is in response to your letter of January 30 requesting the views of the Department of State on H.R. 6301, a bill to authorize appropriations for fiscal years 1981, 1982, and 1983 to carry out the Atlantic Tunas Convention Act of 1975.

The Department of State is in favor of the proposed legislation. Without it, the United States would be unable to fulfill its treaty obligations as a member of the International Commission for the Conservation of Atlantic Tunas (ICCAT). The treaty establishing the ICCAT sets forth a formula for determining annual contributions to be paid by each member country. These contributions pay for the work of the Commission, which is aimed at the conservation and management of Atlantic tuna resources. To fail to pay our membership dues would mean the loss of voting privileges and, for all practical purposes, the end of U.S. participation in the ICCAT. In the view of the Department of State, it is in the U.S. interest to continue our participation in the ICCAT, since we fully support the purposes and goals of the Commission.

The Department suggests that the Committee consider amending its bill so that there is no time limit on the duration of authority to appropriate money under Section 10. Such action would put the ICCAT legislation on the same footing as virtually all other legislation implementing international agreements involving fisheries and other marine resources. An amendment along these lines would not, of course, obviate the need to seek annual appropriations, but would serve to simplify and regularize our work in this area.

United States contribution for fiscal year 1980 was 69,600 dollars, and for fiscal year 1981 the Department is seeking an appropriation of 82,300 dollars. We estimate that the U.S. contribution for fiscal year 1982 will be between 80,000 and 85,000 dollars, and for fiscal year 1983 will be between 95,000 and 100,000 dollars.

The Office of Management and Budget advises that from the standpoint of the Administration's program there is no objection to the submission of this report.

Sincerely,

J. BRIAN ATWOOD,
Assistant Secretary for Congressional Relations.

Mr. BREAUX. With that, we would like to begin our hearing.

We will change the witness order that is published and take Mr. Christopher Weld, who is Executive Director of the National Coalition for Marine Conservation, Inc., as the first witness. The reason we are doing that is because so many times in committee hearings we hear the Department tell us how things are working and then we hear witnesses' complaints.

I would like to give Mr. Weld, who points out some problems in his review, an opportunity to state those problems and then I would ask the Department witnesses, who will follow, to address his concerns as best they can. And then again if he would like to make some comments following their testimony, we can make room for that, perhaps, if we have the time, in which case we probably would want the Department to answer any rebuttal.

Mr. Weld, we have your testimony and we welcome your presentation of it.

[The following was received for the record:]

STATEMENT OF CHRISTOPHER M. WELD, EXECUTIVE DIRECTOR OF THE NATIONAL
COALITION FOR MARINE CONSERVATION

Mr Chairman, my name is Christopher M. Weld, Executive Director of the National Coalition for Marine Conservation, an organization of concerned fishermen and conservationists with members in all the coastal states, including Hawaii, and in Puerto Rico and the Virgin Islands.

The sudden, rapid and alarming depletion of Atlantic Bluefin Tuna populations signaled by the collapse of the fisheries in Norway, Germany and Portugal in the

early 1970's was the catalytic event that led to the founding of the National Coalition. The Coalition participated in drafting the Atlantic Tunas Convention Act of 1975 and lobbied hard for its adoption. Its members have served and continue to serve on the Advisory Committee established pursuant to the Act, and Coalition President Frank E. Carlton has served as one of three United States Commissioners to the International Commission since 1975.

It is our belief that the International Convention for the Conservation of Atlantic Tunas (ICCAT) has failed to stop member nations from continuing to overexploit Atlantic Bluefin Tuna populations on both sides of the Atlantic Ocean. Moreover, ICCAT is powerless to prevent nations which are not signatories to the Convention from entering the fishery. Among those nations likely to do so are Costa Rica, Taiwan and South Korea.

Moreover, we believe that in the foreseeable future ICCAT is likely to take meaningful action to prevent continued depletion of tuna stocks. France and Spain and the so-called Francophone nations of Africa's West Coast, including Senegal and the Ivory Coast, have over the years evinced a disinclination to limit the removals of tunas from major eastern Atlantic fisheries. In the Mediterranean, Italy has annually taken huge catches of giant bluefins for sale to Japanese buyers, while the Japanese have concentrated their fishing efforts upon small bluefin tunas in the Western Atlantic and giant bluefins in the Gulf spawning grounds, mostly within the U.S. 200-mile limit.

A growing number of experts subscribe to the theory that stocks in the Western Atlantic are separate from stocks in the Eastern Atlantic and that, although there is a degree of intermixing evidenced by the occasional return of U.S. tags from fish caught in the Eastern Atlantic, such intermixing is irregular and relatively insignificant. The western stock, they believe, is sufficiently discreet to be treated as a single, separate management unit.

In discussing bluefin tunas it should be kept in mind that there are in fact three separate fisheries in the Western Atlantic. The small fish, being juveniles to age 5 fish support one fishery. They are supposedly protected by ICCAT recommendations until they reach age 2 (14 pounds). The medium size fish (age 6-8) which are protected under U.S. regulations are fished for by the Japanese, and the "giant" fish age 9 and up are fished for by both U.S. and Japanese fishermen.

Depletion of the species is most noticeable among the giant bluefins. Where once these fish thronged the Florida straights in the spring and appeared in huge schools in Massachusetts Bay and the Gulf of Maine in the summer, they now appear in ever decreasing numbers. Bluefins become spawners at about age 5 and live to be as old as 25 or 30, during which time they become increasingly prolific. The object of the U.S. conservation program in the fishery conservation zone is to increase the standing stock of spawners by protecting the small and middle sized fish while allowing a controlled harvest of the giants. To this end, since the adoption of the Atlantic Tunas Convention Act, there has been an absolute moratorium on catching fish between 115 and 300 pounds and a strictly controlled catch of fish smaller than 115 pounds and larger than 300 pounds. Protecting the large class of fish spawned in 1973 was a key element of this program.

Because of the exemption of so-called highly migratory species (meaning tunas) provided by Section 103 of the Fishery Conservation and Management Act, foreign vessels fishing for tunas inside the 200-mile limit are not subject to U.S. regulation. Taking full advantage of this, the Japanese fishing industry has since 1975 deployed a large number of longline fishing vessels in the Gulf and Western Atlantic. According to the National Marine Fisheries Service, the catch of giant fish in the Gulf of Mexico, mostly within the 200-mile limit was:

1975.....	6,381
1976.....	10,077
1977.....	9,800
1978.....	8,500
1979.....	6,000

These figures relate solely to giant tunas taken in the Gulf of Mexico, but in this context the word "giant" must be used loosely because longline gear cannot discriminate between small, medium and giant fish; whereas purse seine gear used by U.S. fishermen is only set on schools carefully chosen to conform to regulations. Note also that these figures do not include very large catches of small fish in the Western Atlantic from Cape Cod to Cape Hatteras.

Today the foreign tuna fishery is the only major unregulated fishery now operating inside the 200-mile limit. Moreover, the Japanese longline tuna fishery, which accounts for most of the foreign fishery effort on tunas, has acted as a counter force to the U.S. conservation strategy. Because the 1973 year class fish were the most

prolific in the small fish fishery in the years 1974-78, the longliners caught huge numbers of them in the Western Atlantic, thereby negating the conservation strategy of protecting the "73's" until they grew to spawning age. In the Gulf of Mexico the large Japanese catches of medium and giant fish, which amounted to three times the U.S. catch of giant fish, effectively cancelled any benefits realizable as a result of the restraint imposed upon U.S. fishermen. U.S. fishermen were in effect forced to forego larger catches in order to enhance the Japanese catch.

Hugh bi-catches of swordfish, sailfish, marlins, sharks, dolphins, wahoo and other pelagic species is another result of permitting longline fishing for tunas in the Fishery Conservation Zone. Foreign fishing for swordfish and marlin is forbidden by management plans produced pursuant to the Fishery Conservation and Management Act but enforcing this prohibition is made difficult by Section 103. Although foreign vessels are required to discard swordfish, sharks and marlins caught by longlines, observers aboard the vessels estimate that about 68 percent of the fish released are dead, and since observer coverage is scanty, there is ample opportunity for cheating.

As a result of oversight hearings held by this Committee, the Regional Councils will try to ameliorate the bi-catch problem through the use of closed areas coinciding with the annual migration of marlins and swordfish; however, stiff opposition from the State Department to the establishment of such area closures is anticipated, and the Coast Guard is expected to demonstrate little enthusiasm for enforcing them.

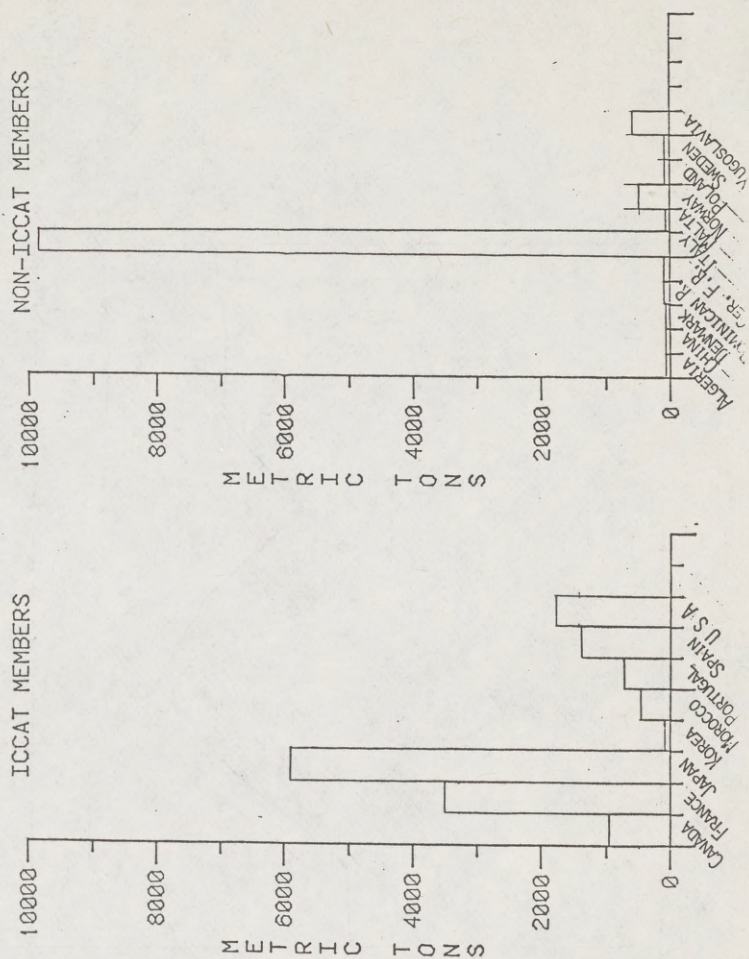
Bluefish tuna meat fetches a very high price in the Japanese market. Thus, the fish taken in the FCZ by Japanese fisherman represent a lost opportunity for American fishermen to cash in on a valuable export market. The market value of tunas taken under the 200-mile limit by Japanese vessels has been estimated as being upwards of \$20,000,000, and given the foreign trade deficit for fisheries products (\$2.2 billion in 1978) it is unreasonable to perpetuate the status quo.

In summary, Mr. Chairman, it is the position of this organization that ICCAT's regulatory regime is ineffective with respect to the conservation of Atlantic bluefin tuna. Without control over fishery effort, no conservation strategy can succeed. Tunas in the Western Atlantic constitute an appropriate management unit which could be effectively managed by the U.S. in cooperation, perhaps, with Canada, Mexico and the Bahamas. On the other hand, to continue to exempt tuna fishing from U.S. fishery jurisdiction is to underwrite the continued depletion of tuna stocks and forego a valuable export market which would have a favorable impact on our balance of payments.

Therefore, we recommend that this committee endorse and support H.R. 4357 which would redefine the term "highly migratory species" to exclude Atlantic Bluefin Tunas. However, we also support H.R. 6310 on the grounds that the scientific research stimulated and coordinated by ICCAT is extremely valuable; moreover, the effort to encourage conservation of tunas in the high seas beyond the 200-mile limit is worthwhile and should be continued.

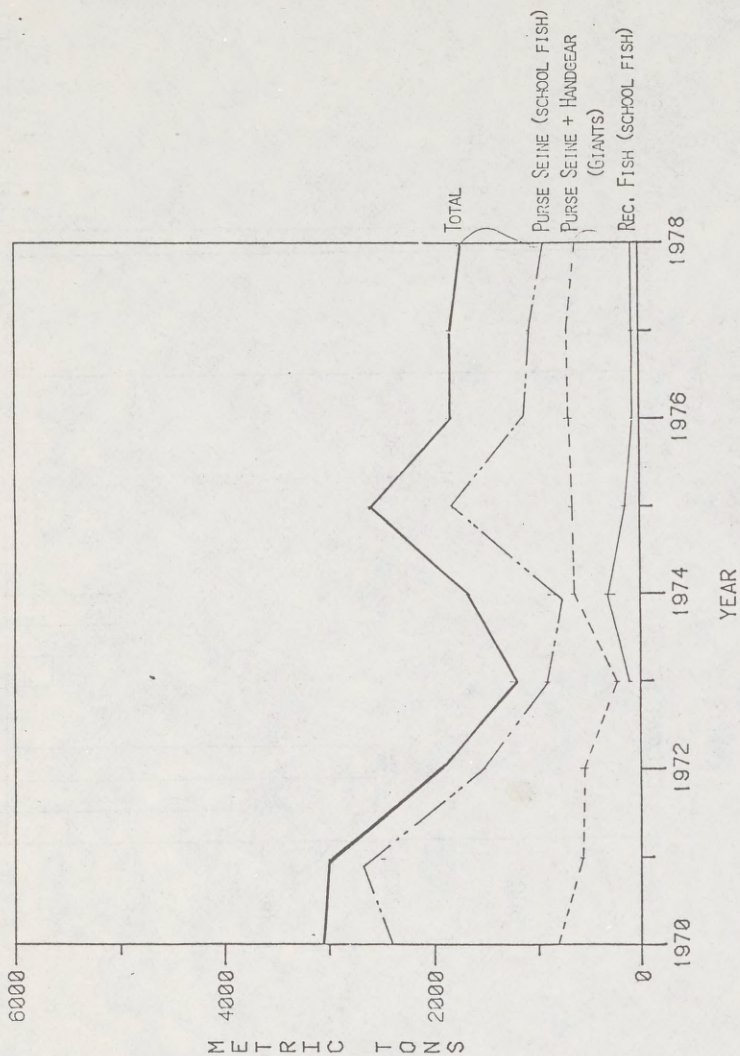
ATLANTIC BLUEFIN TUNA

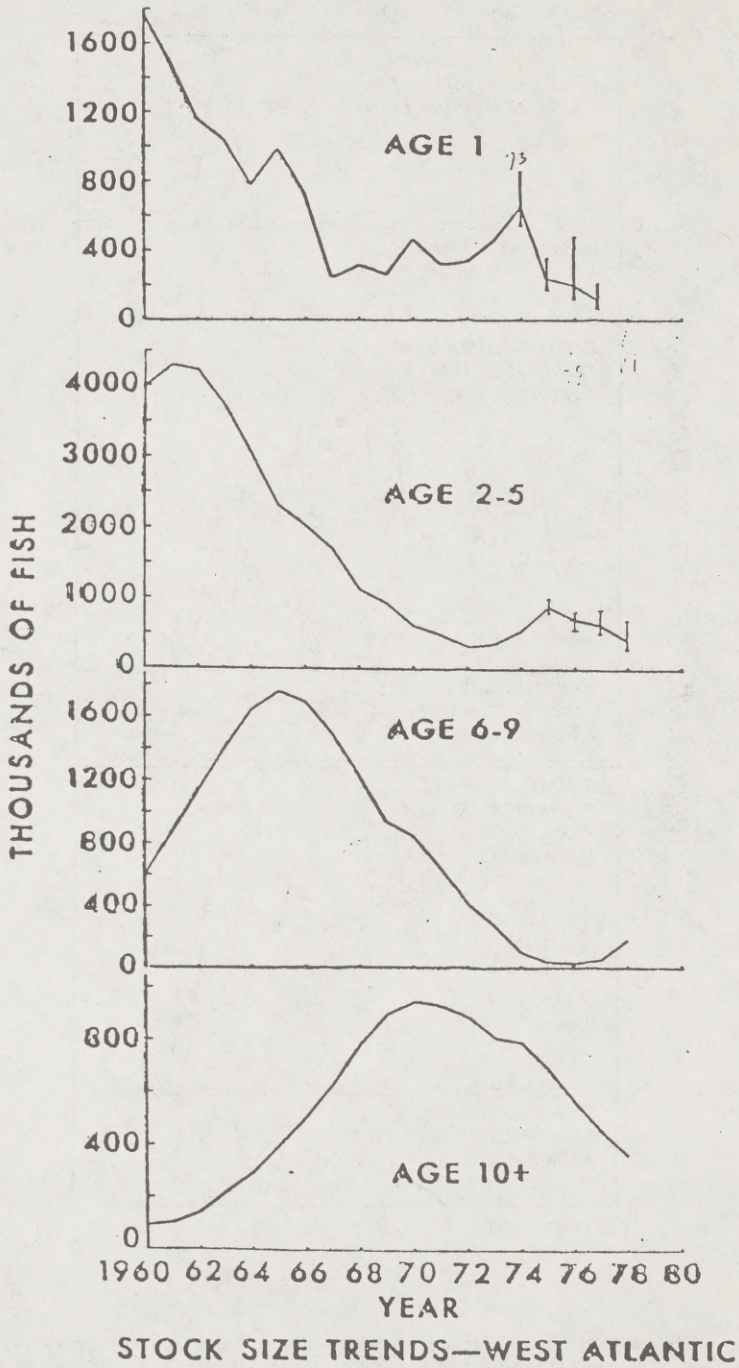
CATCH BY COUNTRY 1976



ALABAMA DEPARTMENT OF FISH AND WILDLIFE

U.S. CATCH





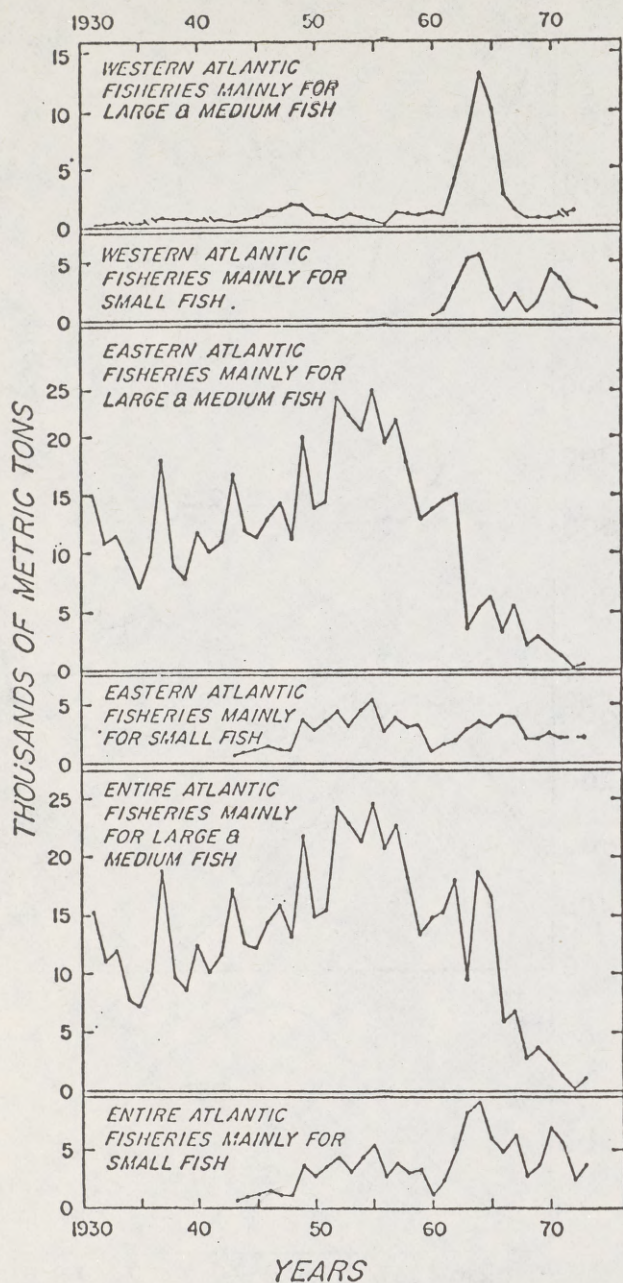
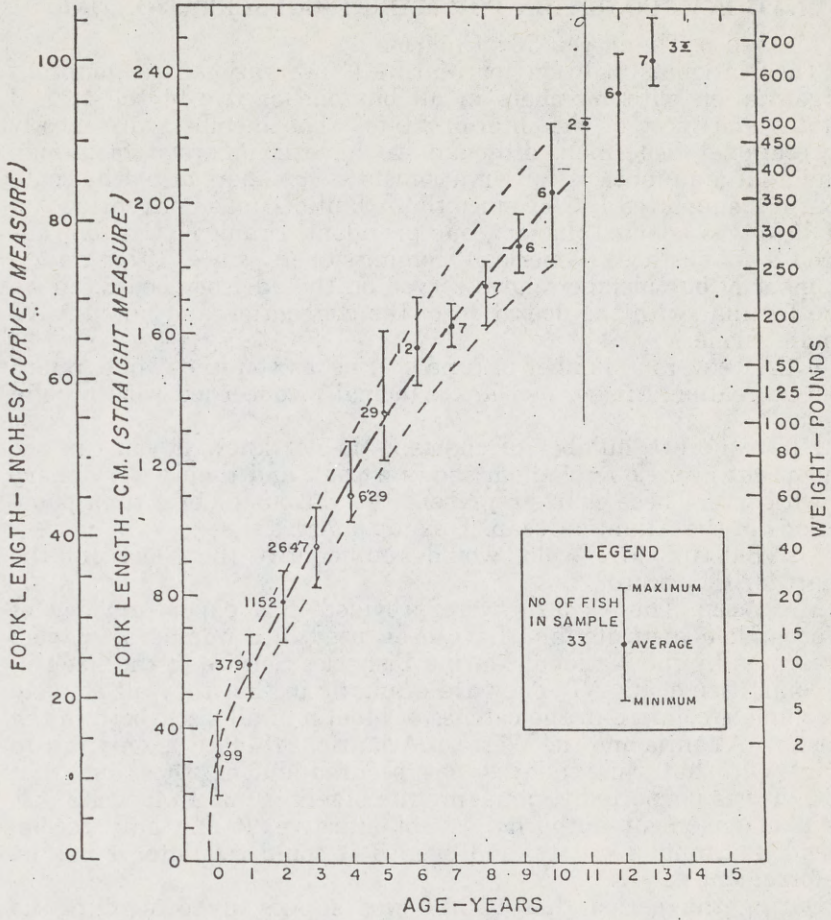


Figure 8. Yearly catches, in thousands of metric tons, of selected fisheries for large and small bluefin tuna in the western Atlantic, the eastern Atlantic, and the entire Atlantic.



STATEMENT OF CHRISTOPHER WELD, EXECUTIVE DIRECTOR,
NATIONAL COALITION FOR MARINE CONSERVATION, INC.

Mr. WELD. Thank you, Mr. Chairman.

The National Coalition for Marine Conservation is a nonprofit organization with members in all but one or two of the coastal States and most of the interior States. The members are mostly recreational fishermen, although we have commercial fishermen and a large number of conservationists as members also. The coalition has supported ICCAT since the Atlantic Tunas Convention Act of 1975 was adopted. In fact, our president, Frank E. Carlton, has been one of three American commissioners since 1975, and a number of our members have served on the advisory board. So we are familiar with the operation of the convention and new ICCAT commissioner.

ICCAT covers a number of tuna species, as you know, but American recreational fishermen are principally concerned with bluefin tunas.

I have here a number of charts. I do not know if you can see them, but every one of them shows a peak and then a very sharp down curve. These charts represent the various bluefin tuna populations in the Atlantic Ocean. This top chart is the—

Mr. BREUX. Mr. Weld, would you identify the source of the chart for the record?

Mr. WELD. These charts were provided in a paper provided at Woods Hole Institute, and have been used in a number of papers presented by the National Marine Fisheries Service to the scientific committee of ICCAT. They are dramatic in that they all point to a complete collapse in the catches of bluefin of all sizes, both in the Eastern Atlantic and the Western Atlantic. I think it is only fair to point out that this collapse has occurred during the time that ICCAT was purportedly managing the bluefin tuna. In fact, ICCAT, as a management authority, is not effective. It can only recommend. It cannot regulate, and even if it could regulate, it has no enforcement power.

During the period that ICCAT was supposedly controlling its membership and reducing the harvest of bluefin tuna, Japanese longliners entered the U.S. 200-mile limit, principally in the Gulf but also in the Western Atlantic, and took huge catches of tuna. The result of these catches was to completely stymie and negate U.S. efforts to manage fisheries in the same area.

In fact, the Japanese longline fishery and other foreign fisheries for bluefin tunas in the 200-mile limit, are the only uncontrolled fishing allowed in the FCZ. To give you an idea of what these longline catches amount to, the number of giant fish caught in the Gulf, was 6,381 in 1975; 10,077 in 1976; 9,800 in 1977; 8,500 in 1978; and 6,000 or so in 1979.

By comparison, U.S. fishermen of all kinds, that is sports fishermen and commercial boats, caught 2,200 to 2,300 fish in the middle seventies, and this number was allowed to increase to about 3,000 plus in 1979. The whole U.S. conservation strategy is based on protecting small and medium fish, trying to restrain fishing efforts on small- or medium-sized fish so that they will grow to be spawners.

In 1973, we were fortunate to have a strong year class spawned and this became the keystone, the 1973 year class became the keystone, of U.S. management policy, and our commercial seiners were tremendous in their cooperation in laying off these fish and allowing them to grow from year to year.

Unfortunately, the difference between longlining and seining is that longlines are indiscriminate and will catch whatever fish are in the waters. Since there were more in 1973, than anything else, the Japanese catch of 1973 year class fish was tremendous from year to year and completely obliterated whatever gains were accomplished by the U.S. commercial fishermen.

What has happened, in effect, is American fishermen have foregone catch and profits in order to feed the Japanese fishery.

It is important to note that an increasing number of scientists are beginning to accept as a fact that there are discreet stocks of tunas in the Eastern and Western Atlantic. There is, to be sure, some intermixing between these stocks; however, this is thought to be irregular and insignificant.

Studies are ongoing that will tend to show how discreet these stocks really are, but Frank J. Mather III, of Woods Hole Institute, who has devoted his entire career to the study of these fish, has stated that these stocks are sufficiently discreet to constitute an appropriate management unit. This body of fish in the Western Atlantic, for the most part, migrates within the fishery conservation zone. At the northern end of their migration some of the fish are in Canadian waters and some portion of the stock is probably outside of the fishery conservation zone at the southern-most point of the migration. Of those fish that are outside the fishery conservation zone of the southern-most point of their migration many are probably in Mexican waters.

It would be possible, therefore, by agreement with Canada, Mexico, the Bahamas, and possibly Cuba to cover the entire range of this western stock and it would be appropriate to consider doing so as a second step after—after extending U.S. jurisdiction to include tunas inside the fishery conservation zone.

One of the things that bothers recreational fishermen more than anything else, aside from the depletion of these stocks, is the bycatch problem. As I said earlier, longlines are absolutely indiscriminate. You hang a lot of baited hooks over 70 or 80 miles and whatever takes the bait gets caught. Now, a lot of other apex predators are in the same waters as bluefin tunas. So these longlines catch large numbers of swordfish, blue marlins, white marlins, sailfish, wahoo, dolphin, and other fish, some of which are significant commercial species, like the swordfish, and all of which are extremely significant as species which support a huge recreational fishing industry in the Gulf and on the east coast. These catches, to some extent, have been ameliorated by regulations promulgated pursuant to fishery management plans, issued by the regional councils.

Under these plans, the longline fishermen are required to discard billfish and other species caught on long-lines. Unfortunately, however, observers on the longliners tell us that about 68 percent of the fish so discarded are discarded dead. This constitutes not

only a waste of fish but a loss of opportunity to the U.S. recreational fishermen.

I think, in closing, the thought I would like to leave you with is that without jurisdiction over these fish, there can be no conservation of them. I think the record of ICCAT on this account is quite clear. This is not to say that ICCAT has not been a very useful and desirable organization because it has been. ICCAT has probably stimulated a great deal of scientific activity and has enhanced our knowledge about the various tuna species and our ability to manage them.

But it is not a management organization and it will not become one in the immediate future because there are too many members of ICCAT who have no interest in conserving tuna stocks, and they made that quite plain by their activity over the years.

Therefore, on behalf of the National Coalition for Marine Conservation, I would like to go on record as being strongly in support of H.R. 4357 which would have the effect of bringing bluefin tunas under the U.S. fisheries jurisdiction. At the same time, we support H.R. 6310, the ICCAT reauthorization bill. We do not believe that these positions are inconsistent. We believe that we can exercise jurisdiction over bluefins and still be consistent with the letter and spirit of ICCAT and with the provisions of the negotiating text of the Law of the Seas Treaty.

I think I would like to stop there and would welcome any questions that the members of the committee might have.

Mr. BREAUX. Thank you, Mr. Weld, for your presentation.

I think it would be a good time for us to go and catch that recorded quorum and then return and begin questioning at that time.

The subcommittee will be in recess for 3 or 4 minutes.

[Short recess.]

Mr. BREAUX. The subcommittee will please come to order.

We had completed receiving the testimony from Mr. Weld and we will proceed with questions at this time.

I get the gist, Mr. Weld, that your concern with ICCAT, the Atlantic Tuna Convention, falls into two basic areas, No. 1, it is not dealing with the billfish problem as well as you would like and, No. 2, you see a continuing depletion of the Atlantic bluefin tuna, despite ICCAT.

With regard to the billfish, I have worked extensively with the Gulf Council, and also with the Department of Commerce and State Department. I think the end result is pretty clear. We have an opinion from the National Marine Fisheries Service, in a letter to the chairman of the South Atlantic Management Council in which Mr. Bill Gordon states:

I can assure you that without substantial alteration of the basic principle underlying the FCMA, inclusion of tuna would add little to our ability to manage billfish.

I also have a legal memorandum from the Department of Commerce which basically says that the councils can, in fact, take actions necessary in the zone to protect billfish. The management plans, most notably of the Gulf Council and South Atlantic Council may close areas of the zone during a certain period of time to protect billfish.

Now, are you of the opinion that that is not enough?

Mr. WELD. Yes, sir. I serve on the New England Fishery Management Council, and I am a member of the Inter Council Billfish Committee so I am familiar with the billfish plan. In the present draft billfish plan, there is a regulation that will close longlining along the Gulf for periods that coincide with billfish in those areas. To what extent this closure will be allowed to stand at this time is not clear.

The draft plan was the subject of some pretty fierce criticism by NOAA counsel, and it gave the impression that that would be resistance from the State Department and NOAA—

Mr. BREAU. Let us assume for the moment that the plan is approved.

Mr. WELD. Assuming that the plan was approved, there is no question about it that the long-line billfish catch could be substantially reduced.

Mr. BREAU. Regarding the Atlantic tuna, what percentage of Atlantic bluefin tuna are caught within our 200-mile zone?

My information is about 15 percent. Do you agree with that?

Mr. WELD. It depends on what you are measuring. Is it 15 percent of the entire Atlantic catch or are we, in fact, dealing with a western catch in which case it is a much higher catch.

Mr. BREAU. I am not sure that if the 15 percent were included in the unilateral management process, we would really get to the problem. If it is 85 percent outside, we still would not be able to touch the 85 percent.

Mr. WELD. Mr. Chairman, there is a discreet western stock, we can effectively manage it as a discreet stock. If, in fact, we have a single stock, then we can manage that part of the stock that is within our zone, and by working with ICCAT we could continue to do whatever can be done through the mechanism of ICCAT, with respect to that other 85 percent that are mostly caught from the Eastern Atlantic stocks.

However, I would suggest to you, sir, that the Japanese are fishing for these fish where they are fishing for them for very good reason. This is where they concentrate to spawn and where they are most vulnerable to the Japanese gear. It is probably also the most economical for the Japanese to fish in terms of fuel expenditure and other costs. The Japanese are, as we know, probably the world's best fishermen, and they have the economics of their fishing figured out to the last nickel. I submit to you, Mr. Chairman, they would not be fishing where they were if it was not their first choice. I submit to you if this is their first choice, their second choice is probably an area where they cannot catch as many fish.

Therefore, to push them out of this area is to reduce their catch and perhaps as far as the western stocks are concerned to reduce their catch very substantially.

Mr. BREAU. I will go ahead and recognize Mr. Studds now.

Mr. STUDDS. Thank you, Mr. Chairman.

Chris, since the spokesmen for the administration will follow you, let me just give you a chance to comment on some of the contentions to be made when they do testify.

Testimony of Mr. Busby of the Department of State includes the following: "We have no reason to believe that there has been

overfishing of bluefin tuna, according to the agreed conservation measures, by other ICCAT members."

Mr. WELD. Again, if we are talking about the entire Atlantic, No. 1, you have got to remember there are a lot of fishing nations who are not members of ICCAT. No. 2, the continuing depletion of the stocks indicates that total removals are excessive.

The single biggest catch of all is taken in the Mediterranean by Italy for sale to the Japanese market. The Italians in effect are operating a contract fishery. I believe that the Italian catch is something in the order of 8,000 or 9,000 metric tons which is a tremendous amount. This, by itself, might, in the judgment of some people, constitute overfishing.

In addition there has been a problem with some of the African nations taking very small fish. These are either member nations of ICCAT who could not control their fishery or they are nonmember nations who don't have to account to ICCAT for their fishing activities.

The reporting in some of the member nations is highly doubtful. It is not at all clear that some of these members really know the extent of their catch.

So with the best intention in the world, they might not be complying with the recommendation. Moreover, the ICCAT recommendations themselves are worded with almost delphic ambiguity—so they are really subject to a broad range of interpretation as to whether practices are consistent or not and whether overfishing is or is not involved.

Mr. STUDDS. Most of my questions obviously will be for the spokesmen for the administration.

Let me just ask. The spokesman for the National Marine Fisheries is going to say: "NMFS is reviewing bluefin tuna regulations to determine if changes are necessary to eliminate problems of overfishing."

Presumably, if there are such changes, we will reduce the U.S. catch and not Japanese or anybody else, is that right?

Mr. WELD. Yes, sir.

Mr. STUDDS. So, to the extent that the Japanese overfish, we loyally compensate for that by reducing the U.S. catch?

Mr. WELD. That certainly has been the history to date.

Mr. STUDDS. Thank you, Mr. Chairman.

Mr. BREAU. The Chair will announce that we will go ahead and recess now. We will come back at 2 p.m., and see if we can finish up at that time.

Mr. Weld, if you would like, we would invite you to stay because when others give their testimony, there may be some interaction.

The subcommittee will be in recess until 2 p.m.

[Whereupon, at 12:03 p.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.]

AFTERNOON SESSION

Mr. BREAU. We'll please be in order.

This afternoon the subcommittee would like to welcome as our first witness—we'll take them as a panel, Mr. Morris Busby, Department of State, and Mr. Carmen Blondin, Director of Office of

International Fisheries Affairs for the National Marine Fisheries Service.

Mr. Busby is our Acting Deputy Assistant Secretary for Oceans and Fisheries Affairs with the Department of State.

Gentlemen, welcome you both, and we're pleased to receive your testimony.

STATEMENTS OF MORRIS D. BUSBY, ACTING DEPUTY ASSISTANT SECRETARY FOR OCEANS AND FISHERIES AFFAIRS, DEPARTMENT OF STATE; AND CARMEN BLONDIN, DIRECTOR, OFFICE OF INTERNATIONAL FISHERIES AFFAIRS, NATIONAL MARINE FISHERIES SERVICE, DEPARTMENT OF COMMERCE

Mr. BUSBY. Thank you, Mr. Chairman.

Mr. Chairman, I've submitted a statement for the record. With your permission, I'll simply summarize the one or two points—

Mr. BREAU. That will be fine. Without objection, the statement will be made part of the record.

Mr. BUSBY. Mr. Chairman, I'm appearing here today to support H.R. 6310. The Department supports the proposed legislation and believes that it is necessary if the United States is to fulfill its treaty obligations as a member of ICCAT.

To do otherwise or to fail to pay our membership dues would mean the loss of voting privileges, and for all practical purposes, the end of U.S. participation in ICCAT, an organization which, as you know, we were instrumental in forming.

One suggestion which I would offer, Mr. Chairman, is that the subcommittee consider amending the bill so that there is no time limit on the authority to appropriate money under the Atlantic Tuna Conventions Act.

This would put the ICCAT legislation on the same footing as virtually all other legislation implementing international agreements involving fisheries and other marine resources.

I would point out that an amendment along these lines would not obviate the need to seek annual appropriations or diminish the desirability of having regular oversight hearings on ICCAT. Should the United States ever desire to withdraw from ICCAT, that option is still available to us, although we in the Department can't see that occurring in the near future.

Mr. Chairman, that summarizes my statement. Would you like for Mr. Blondin to go ahead and give his statement?

Mr. BREAU. Yes, I think we'll get both statements before the subcommittee, and then we'll proceed with questions.

Mr. Blondin, please?

Mr. BLONDIN. Thank you, Mr. Chairman.

Perhaps I, too, could summarize, if that's possible.

Mr. BREAU. Go ahead, please.

Mr. BLONDIN. Well, thank you. Whatever you wish, Mr. Chairman.

First of all, the Department of Commerce also is in full support of H.R. 6310 extending the authority of the legislation, which is necessary in order to carry out the responsibilities under the International Convention for the Conservation of Atlantic Tunas.

Mr. Chairman, ICCAT, which is relatively new having been established in 1969 and presently having 19 participating countries is

in our view, beginning to operate fully as an international organization with management responsibilities.

While it is true that during the initial years, the responsibilities seemed to involve the collection of information, ICCAT has indeed gone beyond that point; and as is provided in the statement, has regulations in place for three species of tunas. Yellowfin is a very important species for American fishermen. This is a species that is largely sought after by fishermen from southern California. When the tropical tuna fishery in the Pacific is closed, they fish in the areas off Africa and other areas throughout the Atlantic.

In addition, there are regulations involving bluefin, and as you've heard from Mr. Weld earlier today, this is a fishery of prime importance, not only to commercial fishermen, but to recreational fishermen as well.

The regulatory measures that have been instituted for bluefin tuna were begun in 1974. I think it's fair to say we are now beginning to see the results of those regulatory measures, and they appear to be providing some improvement of the fisheries.

Mr. Chairman, I think I can conclude by saying that we strongly urge continued congressional support for this international organization, and for the legislative authority which is necessary for full U.S. participation at ICCAT.

Thank you.

Mr. BREAUX. Gentlemen, thank you for your summaries of your testimony.

[The written statements referred to follow:]

STATEMENT BY MORRIS D. BUSBY, ACTING DEPUTY ASSISTANT SECRETARY OF STATE
FOR OCEANS AND FISHERIES AFFAIRS

Mr. Chairman, I am pleased to be here today to discuss H.R. 6310 with you and members of the Subcommittee. This legislation would authorize appropriations for fiscal years 1981, 1982, and 1983 to carry out the Atlantic Tunas Convention Act of 1975.

The Department of State supports the proposed legislation, which is necessary if the United States is to fulfill its treaty obligations as a member of the International Commission for the Conservation of Atlantic tunas (ICCAT). Each member country must make an annual contribution to pay for the work of the Commission, which is aimed at the conservation and management of Atlantic tuna and tuna-like resources. To fail to pay our membership dues would mean the loss of voting privileges and, for all practical purposes, the end of US participation in ICCAT, an organization which the United States was instrumental in creating.

The ICCAT presently has 19 member nations: Angola, Benin, Brazil, Canada, Cape Verde, Cuba, France, Gabon, Ghana, Ivory Coast, Japan, Korea, Morocco, Portugal, Senegal, South Africa, Spain, and the Soviet Union, and the United States. The purpose of the ICCAT, which has been in existence since 1969, is to study and manage the stocks of tuna and tuna-like fish in the Atlantic Ocean.

The ICCAT has taken regulatory action with respect to three species of Atlantic tunas. Since 1972 the Commission has had in effect a ban on the taking and landing of yellowfin tuna weighing less than 3.2 kilograms. In 1979 the Commission passed a resolution for bigeye tuna which is similar to that for yellowfin, calling for measures to prohibit the taking and landing of bigeye tuna weighing less than 3.2 kilograms until 1983. In 1974 the Commission adopted for bluefin tuna a 6.4 kilogram minimum size regulation and a limit on fishing mortality to recent levels for a period of one year. Both of these regulations have been retained every year since adoption and were recently extended until August of 1982.

In the interpretation of the limit of fishing mortality to recent levels, member nations have been left free to choose whether to limit catch or effort. In response to this measure, the United States, through the National Marine Fisheries Service, has put into effect important conservation measures for U.S. fishermen. Other nations have implemented the ICCAT recommendation through a variety of means, and we

have no reason to believe that there has been overfishing of bluefin tuna, according to the agreed conservation measures, by other ICCAT members.

The Department suggests that the Subcommittee consider amending its bill so that there is no time limit on the duration of authority to appropriate money under the Atlantic Tunas Conventions Act. Such action would put the ICCAT legislation on the same footing as virtually all other legislation implementing international agreements involving fisheries and other marine resources.

An amendment along these lines would not, of course, obviate the need to seek annual appropriations or diminish the desirability of having regular oversight hearings on matters involving the ICCAT. Such an amendment would, however, serve to simplify and regularize our work in this area. Should the United States ever decide to withdraw from the ICCAT, that option is, of course, available to us under the treaty. The Department of State, however, cannot foresee the day when this would occur. Participation in the ICCAT is supportive of our fisheries law and our policy on tuna conservation and management. The U.S. tuna industry benefits from our participation in ICCAT and is a firm supporter of the Commission. It is in our long-term interest to belong to the ICCAT and participate in its work and it appears highly unlikely that this situation will change in the foreseeable future.

Thank you, Mr. Chairman. I would be pleased to try to answer any questions which you and members of the Subcommittee might have.

STATEMENT OF CARMEN J. BLONDIN, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Subcommittee: The statement I wish to make today is in full support of the bill under consideration, H.R. 6310, to extend appropriation authority in the legislation implementing the International Convention for the Conservation of Atlantic Tunas. This treaty established the International Commission for the Conservation of Atlantic Tunas (ICCAT) which is the international organization with key responsibilities for the management and conservation of Atlantic tunas. Since its inception in 1969, ICCAT has effectively refined its role in obtaining and coordinating the information necessary for maintaining stocks of Atlantic tuna and tuna-like fish. In addition, ICCAT has become involved in the joint formulation of regulatory proposals for submission to the Parties to the Convention.

The Commission has more than doubled its membership from the original seven countries which ratified the Convention in 1969. The 19 countries which are currently members include the United States, Angola, Benin, Brazil, Canada, Cape Verde, Cuba, France, Gabon, Ghana, Ivory Coast, Japan, Korea, Morocco, Portugal, Senegal, South Africa, Spain, and the Soviet Union. In addition to the member countries, observers from a number of countries and international organizations regularly attend the annual meetings.

In order to carry out its management responsibilities, the Commission organized the Standing Committee on Research and Statistics (SCRS), which is composed of scientists from member countries and is responsible for coordinating data collection and stock assessment programs and reviewing the information obtained from these programs. Work by the committee has resulted in the acquisition of a significant data base for tunas and tuna-like species in the Atlantic. One of the most significant accomplishments of the committee is the establishment of a computerized data processing bank at the Secretariat headquarters in Madrid. The Commission is currently engaged in an ambitious 4-year program developed by the SCRS to study Atlantic skipjack tuna stocks. Known as the International Skipjack Year Program, the project is designed to provide rapidly the scientific information necessary to develop a rational management plan for the Atlantic skipjack tuna resource. Skipjack tuna is believed to be the most abundant of the commercial species of tunas in the Atlantic, and there is growing interest in expanding production from the stocks. At present, there is insufficient basic information to plan this expansion in a rational manner. The United States, which utilizes more than 50 percent of the total Atlantic skipjack tuna catch, strongly supports this program and is participating through the resources of the NMFS Southwest and Southeast Fisheries Centers. Two research cruises are scheduled for 1980. One cruise is underway at the present time and involves the tagging of skipjack tuna in the Caribbean Sea area. A second cruise scheduled to survey the bluefin tuna spawning grounds in the Gulf of Mexico also will involve skipjack tagging.

The United States has also been instrumental in developing the management and regulatory policy of the Commission. The Commission has now taken regulatory action with regard to three species of Atlantic tunas. In 1972, the Commission recommended a ban on the taking and landing of yellowfin tunas weighing less

than 3.2 kg. in amounts greater than an incidental catch allowance per trip of 15 percent of all yellowfin on board a vessel.

In 1979, the Commission passed a resolution for bigeye tuna which is similar to that for yellowfin. This section proposes the Parties take measures to prohibit until 1983 the taking and landing of bigeye weighing less than 3.2 kg. Like the yellowfin tuna regulation, the bigeye recommendation allows a 15 percent tolerance for incidental take.

In 1975 the Commission approved two additional regulatory measures which concern Atlantic bluefin tuna. These conservation recommendations included a 6.4 kg. minimum size regulation and a limit on fishing mortality of bluefin tuna to recent levels for a period of one year. In the interpretation of the limit on fishing mortality to recent levels, member nations were left free to choose whether to limit catch or effort. The Commission has continued to extend until August 10, 1982, the regulation limiting fishing mortality on bluefin tuna which is now in effect.

The developments which culminated in the approval of regulatory measures for Atlantic bluefin tuna were initiated in large part by the United States which raised the level of international concern over the status of the resource and, in 1974, proposed the current regulatory measures. It has been the existence of these regulatory measures which has given the United States the authority to manage the bluefin resources off its own coasts.

Under the Atlantic Tunas Convention Act of 1975, the Secretary of Commerce, through the National Marine Fisheries Service (NMFS), has promulgated regulations which established fishing seasons, quotas, licensing and reporting requirements, enforcement procedures, and gear restriction. In addition, NMFS continually has conducted research and monitored stock levels of tuna in order to meet its ICCAT obligations. Because bluefin tuna represents a recreational opportunity for numerous U.S. fishermen, NMFS has promulgated regulations which promote the broadest possible access to this fishery.

Currently, NMFS is reviewing bluefin tuna regulations to determine if changes are necessary to eliminate problems of overfishing which have been experienced in the last several years, and to allow better gathering of scientific data. Specifically, present vessel capacity in the purse seine fishery for school tuna is sufficient to permit quotas to be exceeded in a single day. Thus, initiation of a vessel allocation system for this fishery is being considered. Additionally, NMFS is considering ways to eliminate unnecessary reporting requirements for fishermen and revisions of the daily catch limits on giant-size tuna by vessels other than purse seine vessels. Because some of these changes constitute significant revisions in the regulatory framework, a regulatory analysis and a draft environmental impact statement are now being prepared. The National Marine Fisheries Service is planning to publish proposed regulatory changes shortly.

In concluding my remarks, I would like to strongly urge continued Congressional support for this international organization and for the legislative authority which is necessary for full U.S. participation in this body. At this time I will be pleased to answer any questions you may have.

Mr. BREAUX. Let me ask both of you to comment on a particular concern that was brought out in this morning's testimony. No. 1, the assertion that there is serious overfishing of the tuna in this particular area, and No. 2 that ICCAT either cannot or will not solve that problem.

In your opinions, is there substantial overfishing, and if there is, who is doing it, how serious is it, and how would you propose to deal with it?

Mr. BLONDIN. Mr. Chairman, perhaps I could lead off here, because I think that it was our statement that indicated overfishing; and I wish to point out, we were talking about overfishing of U.S. quotas by American fishermen.

Mr. BREAUX. By our fishermen.

Mr. BLONDIN. By our fishermen, that's correct. Last year, in fact, within the categories of fisheries quotas that we had established, our seine fishermen, for example, exceeded their quota by about 80 percent. They had a rather small quota of 650 tons, and since the fishery amounted to about 7 or 8 days, it was very difficult to control. In fact, they caught over 1,000 tons.

Now, I think it's fair to say that there is also overfishing going on by other countries as well. I'm not sure that it's all that serious in the sense that it is going to decimate the stocks. I think that what it means——

Mr. BREAUX. What is the condition of the stocks?

Mr. BLONDIN. The condition of the stock at this time? We think it's improving. The difficulty here is that we're dealing with a stock of fish that is rather long lived, maybe 25 or more years, and we don't really begin to get to see enough scientific evidence to support an increase in the population until about 3 or 4 years behind the incoming fishery.

For example, Mr. Weld has indicated that we had a rather strong 1973 year class, and indeed this is true. We took every measure to protect that year class to insure that a substantial number of them would get into the spawning stocks, and this occurs at about age six to eight. They begin spawning at that time and spawn through almost all of their lifetime. And we did have success. We've had a substantial number of those fish now beginning to appear in the spawning stocks.

Mr. BREAUX. What's the problem with the enforcement mechanism, if there's any provided by ICCAT, that would allow us as one of the lead nations participating in the convention not to follow——

Mr. BLONDIN. Well, I think it's just a question of procedural mechanisms, the same problem other countries are having as well. Often times, the seasons are so short because each country sets its own quotas. This is not a quota that is established by ICCAT. Recommendations at ICCAT were rather general; these were to limit mortality to recent levels. While I think the U.S. delegation would have preferred defining precise numbers, as you well know, internationally the lowest common denominator dictates what goes on; and at that time, we found this to be the only way we could limit an increase in fishing effort.

Since 1974—we've only got the statistics through about 1978, at least internationally—we see no increase overall in fishing, that is, Atlantic-wide, including the Mediterranean. The fishing level seems to have leveled off at around 24,000 to 25,000 tons annually being taken by all countries, the United States taking around 2,000 tons.

Mr. BREAUX. I guess what you're saying is that the overfishing that was done, really did not do damage to the stocks.

Mr. BLONDIN. I think that's true, Mr. Chairman. I think it's fair to say that while we wish that it had not occurred, as well as we wish some of the activities had not occurred in other countries, there was some slight overfishing. I think some of the European countries wish that it had not occurred. I don't think we can say that this is going to have a serious effect. Nor am I saying, too, that we are not deeply concerned about bluefin tuna. I think we have seen a decrease in the last 20 years in that fishery. However, we hope we have arrested that decline, and we're back on the way up.

Mr. BREAUX. The percentage of bluefin tuna taken in the U.S. zone by U.S. fishermen is very small. Now, I know for the bluefin tuna fisherman, it's the most important thing in the world to him,

but in light of the total tuna industry, we have information that it accounts for about 0.7 to 0.9 percent of the total tuna take. Is that accurate?

Mr. BLONDIN. We're talking now about the international ratio?

Mr. BREAU. Yes.

Mr. BLONDIN. Well, it's something on the order of 2,000 tons to 24,000 or 25,000 tons. So, we are talking about less than 1 percent, I think.

Mr. BREAU. What is NMFS' position, to continue with you, Mr. Blondin, regarding conservation of the billfish that are impacted by the Japanese tuna longlining in our zone? Please elaborate for the record NMFS' position as to what can be done within our zone to regulate the taking of billfish that are caught incidentally by Japanese longliners in their quest for tuna which we do not regulate?

Mr. BLONDIN. Well, Mr. Breau, I think first of all, as you read earlier this morning from the correspondence from the Department of Commerce, it's clear that we think a great deal can be done in this area, so long as it's done under the umbrella of conservation, and it is reasonable.

As you know, the five Atlantic Seaboard Councils have been working on a joint management plan for billfish. We're in the process of reviewing that. Some of the regulations that would be called for are absolute closures of rather extensive areas for long periods of time.

I think this has caused some concern. I'm not sure that our agency has come out with a definitive position at this point, but there is some concern that we may have overstepped the bounds of reasonableness.

Mr. BREAU. Do we include U.S. observers on the Japanese longliners?

Mr. BLONDIN. We have, Mr. Chairman. In fact, last year we had about 20-percent coverage on board Japanese vessels, and I think we've gotten a good fix on the incidental take of billfish and what the survival rate has been; and in fact, we've also charged the Japanese for the observers. I think there may have been some reports at earlier hearings that the observers were being placed on vessels at the cost of taxpayers, and this is not true. A bill went out to the Japanese for last year. I think it was on the order of around \$80,000. So, we have had observer coverage.

Mr. BREAU. Mr. Busby, let me ask you along this line, what is the position of the State Department with regard to the various Council plans for protection of billfish taken incidentally to the catching of tuna by the Japanese?

Mr. BUSBY. Mr. Chairman, the Department of State certainly has no objection to regulating the take of billfish, which of course, is a species which comes under our law. Like the Department of Commerce, we believe that if we're going to regulate the taking of billfish which is taken incidentally to tuna fishing, it has to be done in a reasonable way; and like the Department of Commerce, we are at the present time considering the Council's plan. We do have some concern that the rather sweeping time and area closures proposed may be a little more than what we would like to see. But we, like Commerce, have taken no final decision.

Mr. BREAU. For the record, what is the position of State with regard to proposals to bring tuna within the exclusive fisheries management authority of the U. S. in our 200-mile zone?

Mr. BUSBY. We've testified on several occasions that the question of whether tuna is to be brought under the law or not is largely a domestic fisheries management matter. However, we are charged under the FCMA to negotiate international arrangements for tuna fishing, which largely protect the U.S. tuna industry; and we've been armed through that law with some tools to accomplish that purpose. I think there can't be any question but that if we were to move in this direction with regard to bluefin tuna, it would have a damaging effect on the position that we're trying to uphold in some other international negotiations.

Mr. BREAU. Were a large number of U.S.-owned tuna vessels sold to the country of Mexico?

Mr. BUSBY. I have information that there were five U.S.-tuna vessels recently—and I got it from the newspaper, frankly—five U.S.-tuna vessels whose transfers have been approved to Mexican flag. There are five other vessels going to Mexico which I believe were registered in the Netherlands Antilles.

Mr. BREAU. Just for the record, I will insert a copy of the article, "Ten tuna boats to move to Mexico."

OK, I might have some additional questions, later. I'll ask Mr. Forsythe, now, for questions.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Thank you both for your testimony.

Can either one of you answer a statement I heard that many of the ICCAT nations are not even enforcing ICCAT against their own nationals, let alone any foreigner?

Mr. BLONDIN. If I might answer the question, sir, let me say that having participated as a U.S. Commissioner at ICCAT, it is true, there are some countries in the northwestern part of Africa who are not in a position to fully enforce, the regulations to the degree that we might find to our satisfaction. But I think it's clear that among those countries that are the principal bluefin fishermen, that they are being monitored to some degree, and there is enforcement.

For example, Canada, Japan, France, Portugal, and Spain all have active regulations and there are signs that there is enforcement, just as we are enforcing as to our fishermen. They are also experiencing some of the same difficulties we are, however, when you divide the quota that is established at the national level among the various users, sometimes it's very difficult to remain within that quota. I think it's fair to say that since 1975 the effects of the regulation have been good, and certainly the scientists have indicated this at the last meeting in Madrid in November last year. The regulations appear to be effective.

There are some countries who are outside of ICCAT at the moment which have significant fisheries on bluefin tuna and whose activities have caused us some alarm. One country in particular is Italy; and as you may remember this morning, Mr. Weld mentioned that they had been taking a substantial amount of fish. This is true. Their fisheries at the time we went into regulation in 1975 was somewhere around 6,000 tons of bluefin tuna. If my memory

serves me, the catch did after that period go up as high as 9,000 tons of fish; and the last indication we have of 1977 catch is back down to 6,000 tons.

What we've done, is ask the Italian Government to take note of the fact that there is an international regime. We urge their joining that regime. They, at least for the past 2 or 3 years, have had observers at ICCAT meetings. They have participated, but not to the extent of voting; but they have been present.

Further, we hope that since Italy is a member of the EEC and that since the EEC has taken over fisheries jurisdiction for the entire community and also wishes to become a member of ICCAT, that this will solve that problem.

Mr. FORSYTHE. Well, that's encouraging news.

Mr. BLONDIN. Yes, it is encouraging, and I think if we keep hammering away at this, we may find that we'll have all the principal countries involved, and hopefully we will begin to see better improvement of the fishery.

Mr. FORSYTHE. As I'm looking at this FAO report, it's clear that Italy is the largest nation involved in the fishery. They only started in 1972, didn't they? It's rather a new enterprise for them.

One of the problems that I have with the bluefin fishery is the impact of the fishery on the recreational fishing industry along the eastern coast. We're constantly being told, "Well, the good ones are all gone by the time they get out in the Atlantic." It is the traditional sports catch that is in trouble. Have you found any change in that situation, that more mature fish are moving on up the coast?

Mr. BLONDIN. Well, I think that it's a matter simply of environmental conditions. Off the coast of New Jersey where you're interested, in the past several years, mostly smaller fish have been coming in closer to shore where fishermen obviously operating in relatively smaller boats have a limited capacity to move out into areas where you might find larger fish. So they've been catching, in fact, smaller fish, most of them the school size that haven't even entered the spawning stocks yet.

In fact, the largest of the fish, the record, are caught well to the north of the United States in Canadian waters. These are fish that certainly must have migrated at one time or another from the Gulf of Mexico all the way northward into Canadian waters where they generally are found in the latter part of the summer or early fall.

Mr. FORSYTHE. They must know our fishermen are looking for them and detour.

Mr. BLONDIN. They do, and I think we have a large fishery, both harpoon and line, and a seine fishery off New England; and they seem to have had some good luck in recent years.

Mr. FORSYTHE. I guess that about covers my points at this time, Mr. Chairman.

Mr. BREAUX. Mr. Studds?

Mr. STUDDS. Thank you, Mr. Chairman.

This testimony reminds me a little bit of my first term when we were fighting for the 200-mile limit law. We were told by the Nixon administration that what they really wanted was authority to regulate U.S. fishing within 200 miles. They did not want any authority, thank you very much, because it would upset the Department of

State to regulate foreign fishing. And now, incredibly, we hear references to overfishing by American fishermen, and we're not asked to do anything with respect to foreign fishermen.

Let me ask you this. Of the other member nations of ICCAT, we've already heard that some of them have difficulty enforcing against their own nationals.

How many of them claim the right to enforce against foreign nationals within 200 miles of their shores?

Mr. BUSBY. Mr. Studds, unless I'm mistaken I believe they all do.

Mr. STUDDS. They all do.

Mr. BUSBY. They all do. Now, whether they exercise that jurisdiction against U.S. tuna fishermen in those waters is another question.

Mr. STUDDS. Let me turn that around. The fact is, as I understand your testimony, that the United States is the only member nation of ICCAT which does not assert the lawful authority to regulate foreign fishing for tuna within their 200-mile zone, is that correct?

Mr. BUSBY. I'm sorry, but Japan and Korea are also members, and they do not.

Mr. STUDDS. Japan and Korea do not, but they're too busy fishing in other people's zones, right?

Mr. BUSBY. By and large, the vast majority—I'm looking at the list—the vast majority of ICCAT members do claim jurisdiction over tuna.

Mr. STUDDS. Is there much tuna caught immediately off the coast of Japan, or are they all over here?

Mr. BLONDIN. There are areas off the coast of Japan where tuna is caught.

Mr. STUDDS. That's not important in any event, but the fact of the matter is, that we are one of the very few—not the only—certainly one of the very few countries that do not assert the lawful authority to enforce against foreign vessels within our 200-mile zone with respect to tuna; and you are asking us to continue to refrain from asserting that jurisdiction even with respect to Atlantic bluefin tuna, which you have pointed out is a relatively small percentage of U.S. tuna catch on the grounds that it will upset the U.S. international position. How could it do that if we're in a distinct minority internationally anyway?

Mr. BUSBY. Well, there's no question, Mr. Studds, but that we are in a minority. We've never denied that, but the FCMA clearly states the U.S. position.

Mr. STUDDS. I understand that, but we're considering amending that law, and you're asking us not to do it on the grounds it would somehow affect our international negotiating position.

Mr. BUSBY. Yes, sir; and in fact, at the present time we're in the same situation with regard to billfish. We claim jurisdiction over billfish, notwithstanding the fact that we believe they are highly migratory. What I'm saying—

Mr. STUDDS. You claim jurisdiction because the law says so.

Mr. BUSBY. Exactly. What I'm saying is, if the United States now moves further in that direction and claims jurisdiction over a particular species of tuna—for whatever reason—it will be perceived internationally as hypocritical. It will be thrown back in our

face in the same way that the billfish question is from time to time now.

Mr. STUDDS. And thereby cause us what difficulty in which international fora?

Mr. BUSBY. We are attempting to negotiate new arrangements in the eastern tropical Pacific. We are also attempting to get something off the ground in the South Pacific. We're attempting to do what the law requires, which is to negotiate international arrangements for the management of highly migratory species of tuna.

Mr. STUDDS. Are you suggesting that we are attempting to convert the overwhelming majority of the world to our original point of view with respect to highly migratory species?

Mr. BUSBY. I don't think that's possible. That's not what we're trying to do.

Mr. STUDDS. Well, what are we trying to do?

Mr. BUSBY. We're trying to come up with an international management system for stocks of fish that migrate over vast areas of the ocean, and through the zones of a number of countries.

Mr. STUDDS. I just want the record to reflect, No. 1, that we're alone, or almost alone, in taking the position that we do, and you're asking us not to change so that we couldn't conceivably upset the international community since we'd be moving toward the prevailing international position if we were to adopt the kind of amendment under discussion.

Mr. BUSBY. I would like to say, sir, that I'm not asking you not to change. I'm pointing out what I think might be the difficulty for us in trying to further the purposes of the law with regard to tuna if we were to change.

Mr. STUDDS. I understand. There's delicacy of necessity of wording it, but essentially that's what you're saying.

Now, what restrictions are there on Japanese tuna fishing under ICCAT, bluefin tuna fish? What ICCAT regs apply to the Japanese as they come off New England catching bluefin tuna?

Mr. BLONDIN. Well, they are under the same regulatory scheme as we are, to limit—

Mr. STUDDS. Wait a minute. Our fishermen are under a regulatory scheme propounded by NMFS. The Japanese are under no such thing.

Mr. BLONDIN. By NMFS, under the authority of this act that we're looking at today, which comes from ICCAT; yes, sir. I think all of this stems from ICCAT.

Mr. STUDDS. I understand that, but we put a number of limitations on our fishermen, do we not?

Mr. BLONDIN. Yes; and—

Mr. STUDDS. What limitations are the Japanese under?

Mr. BLONDIN. A number of limitations as well.

Mr. STUDDS. Imposed by whom?

Mr. BLONDIN. Imposed by the Japanese fishery agency on their fishermen, and they have, as we have, looked at what their average take was during a certain period; and their limitation, based upon that average is something on the order of 5,400 tons of fish, as I recall.

Mr. STUDDS. Are we talking 5,400 tons of Atlantic bluefin in the western Atlantic?

Mr. BLONDIN. We are talking about 5,400 tons of bluefin throughout the range of the northern bluefin tuna stocks, which is the eastern, western, and Mediterrean.

Mr. STUDDS. You're putting aside the evidence that we may have, at least for breeding purposes, two distinct stock?

Mr. BLONDIN. Well, I'd like to address that a little later. I'd be very happy to.

Mr. STUDDS. OK, 5,400 tons. Now, what period of time is that based on?

Mr. BLONDIN. They chose to use the 1974 time frame.

Mr. STUDDS. Why do you suppose that was?

Mr. BLONDIN. Probably because it was the best one for them.

Mr. STUDDS. That's what I figured.

Mr. BLONDIN. All we were trying to do was to insure that no fishing effort increased, that we put a cap on it; and we chose the years 1970 to 1974. In fact, if we'd gone back earlier, we could have come up with a higher number and allowed our fishermen to take a few hundred more tons.

Mr. STUDDS. What is the limit on the U.S. fishermen under your regs?

Mr. BLONDIN. Somewhere around 2,100.

Mr. STUDDS. Less than half the Japanese number?

Mr. BLONDIN. Yes, because our average had been—

Mr. STUDDS. In those years.

Mr. BLONDIN. In those years, that's correct.

Mr. STUDDS. Do you think it would have made much sense if we had said to the Russians and to the Japanese, "We're not going to extend fisheries jurisdiction to 200 miles. Why don't you folks just pick a year, and promise not to increase your catches", and they could have picked 1974, record devastating catches of the groundfish in New England, and fished them in perpetuity under the logic you're asking us to accept. I don't understand it.

Mr. BLONDIN. Well, I'm afraid that that analogy is not the same. First of all, the fishery from the 1960's had come down substantially to a point where, let's say, a country did decide to choose a figure which gave it a 10-percent benefit over what some other country might have chosen. That would have been far better than not having any regulations at all; and that's what we were faced with.

Mr. STUDDS. How many of the Japanese 5,400 tons are taken within our 200-mile zone?

Mr. BLONDIN. I don't think there is any data on that, but in the breakdown, eastern and western Atlantic, it's on the order of about half of that.

Mr. STUDDS. Roughly half.

Mr. BLONDIN. Roughly 2,500, yes.

Mr. STUDDS. Who enforces the ICCAT regs on the Japanese fishermen within 200 miles of our shore?

Mr. BLONDIN. As far as tuna is concerned, it is enforced by Japan.

Mr. STUDDS. By Japan. It's just tough luck for us if they enforce the way they did under ICNAF, for example?

Mr. BLONDIN. Well, I don't think we have any indications that their enforcement is anything but as honest as ours.

In fact, we've had, as I said earlier, observer coverage on 20 percent of the vessels, and extrapolating the catches there, we think that their reporting, at least in the past few years, is fairly accurate, judging by our extrapolations.

Mr. STUDDS. Do I understand both of you to testify that you don't think there's any serious overfishing of bluefin tuna?

Mr. BLONDIN. I'm sorry; there is some overfishing. When you use the term "serious" in connection with devastation of the stocks, I think the answer has to be no.

Mr. STUDDS. You said earlier that you thought the overfishing was by American fishermen?

Mr. BLONDIN. The overfishing that we addressed, that part of the statement that you questioned this morning, related to American overfishing.

Mr. STUDDS. Well, is there foreign overfishing?

Mr. BLONDIN. I've said yes, Mr. Studds.

Mr. STUDDS. Now, by overfishing, do you mean in excess of the numbers allotted by the respective governments, quotas?

Mr. BLONDIN. That's correct.

Mr. STUDDS. OK. Not much we can do about that, is there?

Mr. BLONDIN. Yes; there is something we can do about it, and that is continue in the only international forum we have at the moment, to continue leadership, and to continue those pressures where we can——

Mr. STUDDS. Why don't we do what other nations do, which is say: "We will enforce in our 200-mile zone?"

Mr. BLONDIN. Because I think, Mr. Studds, that if we do enforce within our 200 miles, beyond what Mr. Busby has said, I think it creates another problem. At the moment, as he has said, there are many nations that have extended jurisdiction over tunas. From the practical side of it, if the United States were to extend jurisdiction over tuna and carry out active enforcement, I think this example would induce other countries to do the same thing.

Mr. STUDDS. They're already doing it.

Mr. BLONDIN. They're not doing that in the Atlantic, sir, where our fishermen fish off several countries in western Africa, and they fish within 200 miles, at this time. Even though several of those countries have jurisdiction over tunas, they do not actively carry out enforcement over——

Mr. STUDDS. One last question. I know we've got a vote. When you say there's overfishing, but you're not quite sure whether you call it serious, is there—to put it in the most important context—is there a downward trend in the stock size of the Atlantic bluefin tuna?

Mr. BLONDIN. There has been, except from the point of regulation in 1975. It has stabilized. We believe we're beginning now to see an upturn. But as I indicated earlier, the data that's available, unfortunately, are 2 or 3 years old——

Mr. STUDDS. We're seeing an upturn now?

Mr. BLONDIN. We're seeing an upturn.

Mr. STUDDS. Let me read to you from Mike Paprick of the National Marine Fishery Service, U.S. section meeting with his advisory committee and technical experts, October 31, 1979: "The total

Atlantic stock size is showing a downward trend as expected with a drop in recruitment."

That's your own expert.

Mr. BLONDIN. Yes; that's correct, and I think what he was addressing at that time was a question of the midsize fish, that is, those fish that were fished on, rather heavily by seiners in the western Atlantic, so that we had limited escapement into the spawning stocks. We're talking about medium-size fish.

Mr. STUDDS. "The total Atlantic stock size," he says.

Mr. BLONDIN. I think if you look at that—and I was present at that meeting—you'll find out that that was based on data for 1976. I attended a meeting recently in Panama City where the indications were that we have at least stabilized and possibly are on an upturn.

Mr. STUDDS. Well, I appreciate your concern of the possibility of American overfishing, but I'm not any more moved now than I was 7 or 8 years ago when your two agencies were making the same arguments against enactment of the 200-mile bill in the first place. I don't think your arguments had any more merit then than they do now, frankly.

Thank you, Mr. Chairman.

Mr. BREAU. With that second buzzer, we will take a recess. I would like you to come back for about 5 minutes more of followup questions.

The committee will be in recess for 5 minutes.

[A short recess was taken.]

Mr. BREAU. The subcommittee will please be in order.

Mr. Blondin, let me ask you if you would discuss something that I'm not quite clear on, myself. Our prior witness this morning talked about an eastern and a western stock of Atlantic bluefin tuna, and that because they're distinct, they could be managed separately. No. 1, I'd like to ask you, what are your thoughts, or what is the U.S. position, with regard to that theory?

Mr. BLONDIN. Mr. Chairman, it is possible that there are two stocks, and when we asked the scientific committee to look carefully at this, their conclusion was inconclusive at the time, based upon the information we had.

What we do have is clearly two areas where spawning occurs; one in the Gulf of Mexico and one in the Mediterranean. We have had some tagging results, and we have found that some fish that were tagged on the western Atlantic side, for example, off Cape Hatteras, ended up in the Bay of Biscay on the eastern side; and vice versa, there have been some that have been tagged on that side that have ended up on our side.

We've had some genetic studies of the animals from the eastern and western sides, and we have not been able to find any discernible genetic differences. So, at least at this time, the animals on both sides of the Atlantic appear to be exactly of the same genetic structure.

Mr. BREAU. What is the position of our advisory committee with regard to this issue?

Mr. BLONDIN. Initially, I think that many of us were seeing this as a chance to control the Japanese shift of fishing from the eastern Atlantic to the western Atlantic, and had felt that this

might be possibly a management concept. But I think the more we looked at it, the more we realized that we might lose control overall in the Atlantic, particularly on the eastern side. Then, one might very well argue, if we had the only regulations on our side, and even if there were two distinctive stocks and the migrations were rather heavily from the west to the east, that we would be bearing the brunt of all the regulations, and the other side would be getting the benefit of our savings.

I think after looking at this very carefully for 2 years, the advisory committee, last year in September, looked at this, and with the exception of one member, all were in favor of continuing the kind of controls that we have at this time—an Atlantic-wide regulatory regime rather than separating it into an east and west.

Mr. BREAUX. All the members except one?

Mr. BLONDIN. All the members except one.

Mr. BREAUX. Is the one the Mr. Weld who testified this morning?

Mr. BLONDIN. I believe so, yes, sir.

Mr. BREAUX. Mr. Busby, let me ask you this, if we were to place the Atlantic tuna under our exclusive management jurisdiction, how would that affect our position, vis-a-vis our negotiations on the Inter-American Tropical Tuna Convention?

Mr. BUSBY. As I said earlier, Mr. Chairman, I think it would have a detrimental effect on the position which the United States has put forward in that particular forum. We hope we have set the juridical problem aside. For the United States now to move to declare jurisdiction over a single species of tuna would certainly be viewed by other countries as something of significance, and be something which they would play upon.

Mr. BREAUX. I get the impression it would knock out our position. I mean, in plain words, it would be almost totally inconsistent by adding one species of a larger species and then go to the negotiations on the Inter-American Tropical Tuna Convention and argue at that point, "Well, however, these remaining species are highly migratory and therefore we don't recognize your jurisdiction over them."

Mr. BUSBY. In my opinion, it would be perceived that way by the other countries.

Mr. BREAUX. Mr. Forsythe?

Mr. FORSYTHE. Thank you.

Buzz, you mentioned that you would like to see the authorization made a permanent authorization rather than a timed authorization.

What is the impact of having a limited authorization.

Mr. BUSBY. I think the present situation creates some uncertainty in the international community as to whether the administration is going to be able to continue to fulfill its obligations after our statutory authority runs out every 3 years; and as I said, it does not mean that there would not be an oversight function exercised by this committee. This is the only authorization legislation constructed this way, to my knowledge. All other fishery commissions run in perpetuity. To be sure, Congress has the authority to repeal those laws and to exercise oversight. All options are still open.

Mr. FORSYTHE. Thank you.

Thank you, Mr. Chairman.

Mr. BREAUX. My last question is more of a technical nature for the record.

If we decided to take the approach in the authorization of not authorizing such funds as may be necessary, what would be the recommendation of State with regard to the funding for ICCAT?

Mr. BUSBY. Mr. Chairman, if you'll let us have that question, we'll answer it for the record.

Mr. BREAUX. All right, and we need it fairly quickly. If you can, call, and then follow it up with a letter so we can have that amount.

Mr. BUSBY. Certainly.

Mr. BREAUX. Gary, do you have some more questions?

Mr. STUDDS. Let me just ask you, one of you testified with respect to the problem of a bycatch of billfish by Japanese longliners in pursuit of tuna, bluefin tuna.

How do you propose to deal with that problem? I'm not quite sure; or how can one deal with it if one cannot assert regulatory authority over the Japanese bluefin tuna fisheries?

Mr. BLONDIN. Well, I think there's been an attempt to do that, Mr. Studds. At this point, you know, we do have a billfish plan in effect even at this time. I think that—

Mr. STUDDS. Which you people have come out strongly against, have you not?

Mr. BLONDIN. No, we do have a billfish plan in effect now, which is a PMP, a preliminary management plan. What the councils are working on is a fishery management plan, and that's what we were talking about.

Mr. STUDDS. Well, that's what the act is about, is not your PMP's, but fishery management plans by the regional councils, right? And the regional councils have come up with ways of dealing with this which as I understand it, you have stated you find objectionable.

Mr. BLONDIN. I'm not quite sure that either of us came out that way. I think we said we were looking at it, and there were some parts of it that concerned us.

Mr. STUDDS. Which were the parts dealing with the bycatch, right? How do you deal with it if you can't regulate the directed fishery?

Mr. BLONDIN. Well, I think you can regulate the indirect fishery, regulate the bycatch by dealing with it in a reasonable manner.

Mr. STUDDS. How do you deal with a bycatch in a reasonable manner if it's dead?

Mr. BLONDIN. You can establish quotas.

Mr. STUDDS. How can you establish a bycatch? Do you know what a longline is? You put it out, and somebody bites it without consulting the National Marine Fisheries Service, and you don't know what's on it until you pull it in.

Mr. BLONDIN. That's true.

Mr. STUDDS. And what do you do if it's got a lot of billfish on it?

Mr. BLONDIN. In certain areas you can almost predict what that's going to be. I think we're now getting enough—

Mr. STUDDS. You may be able to, but I think you can—you can what? Have you ever been longlining?

Mr. BLONDIN. Have I ever been longlining?

Mr. STUDDS. Part of the excitement of it is precisely that you don't what's going to come up.

Mr. BLONDIN. Yes, sir, I have. I've spent 10 years at sea.

Mr. STUDDS. OK. Now, what is it you can predict on a longline?

Mr. BLONDIN. I think that with the data that we're collecting, we are beginning to see patterns develop. It takes time. You're right. The first time you try this, you don't know what is going to come up in a particular area; but after you've fished for awhile in that area, I think you can come up with patterns. And we hope that this is the kind of thing that we might apply in developing overall regulations. Certainly the joint efforts by the five Atlantic Sea-board Councils went in this direction. I think that they've done a creditable job of putting together a plan. There are certain problems with it that hopefully can be overcome but I think we've made some gains in that area.

Mr. STUDDS. You're aware of the position, I believe, in response to questions put out by the chairman and ranking members of this subcommittee on the subject, for example, from the Regional Fishery Management Council in the Gulf of Mexico.

They said, and I quote,

Most of the problems related to development of a management plan for billfish relate to the exemption of migratory tuna from regulation under the FCMA. It has been very difficult to develop management measures which protect billfish stock for domestic utilization without interfering with or unduly restraining foreign tuna fishing. Although measures have been implemented which reduced the billfish mortality associated with this fishery, the mortality rates remain as high as 62 percent of fish hooked. Because of these problems and a concern for the high bluefin tuna harvest from the Gulf of Mexico, our council has recently adopted a position in favor of amendment of the FCMA to remove the tuna exemption.

Now, I know you're not in favor of the amendment, but how do you respond to their concern about the mortality rates of billfish hooked in a bycatch?

Mr. BLONDIN. Well, it is a serious one, Mr. Studds. There's no doubt about that, and I think that we have been attempting to work at it with the tools that we have been given. I think it's rather interesting to note that the joint committee in developing their plan made a comment and a recommendation in that plan which says, and I quote, in addition to—

Mr. STUDDS. Which joint committee are you referring to?

Mr. BLONDIN. I'm talking about the Joint Intercouncil Committee that Mr. Weld was talking about this morning.

One of their recommendations is, "It is recommended that an international plan for the regulations of billfishes and sharks be developed and implemented under the auspices of international organizations such as ICCAT."

That tells me that they realize that it's difficult to go it alone, that in order to manage these fish, we must do it internationally and collectively.

Mr. STUDDS. But we are the only ones going it alone, now. You've got it inside out and backward. You just said you'd try to do the best job you can with the tools you've been given. Presumably you mean the tools under the law that you've been given by the Congress. Here we are offering you an infinitely easier tool and you don't want it. What job is it that you really want to do? Why are you objecting? Whose interest are you concerned with?

Mr. BLONDIN. I think we're concerned with the entire American interest.

Mr. STUDDS. Go ahead. Elaborate on that.

Mr. BLONDIN. Well, I think Mr. Busby already has elaborated on that, Mr. Studds, and I don't think I could add very much to it.

Mr. STUDDS. Am I to infer from what you said that your objections have nothing to do with the bluefin tuna fishery in the Western Atlantic? If that were the only question, you would see no problem, I take it, in this amendment?

Mr. BLONDIN. Well, I think to answer that would be to take it out of context in any event. If we were dealing only with the bluefin tuna fisheries, period, and nothing else, no other considerations; perhaps there might be a different answer.

Mr. STUDDS. OK. Now, what are the other considerations?

Mr. BLONDIN. All of the tuna fisheries that are involved.

Mr. STUDDS. In other words, the tuna fisheries on the west coast?

Mr. BLONDIN. No, not only the tuna fishery on the west coast. I said earlier today that our largest catch in the Atlantic is yellowfin tuna, and that that occurs in areas outside of the jurisdiction of the United States; and it would obviously have an impact on those fisheries, aside from the tropical Pacific tuna fishery.

Mr. STUDDS. What affect could this have on the distant water tuna fishery based in California? What could other nations do, off whose shores they fish, that they have not already done for years?

Mr. BUSBY. Perhaps I could address this, Mr. Studds. I must say, I'm a little confused by the discussion.

With regard to State's position, the manner in which we view the billfish plan which is currently under consideration as a billfish plan, not a plan to regulate fishing for bluefin tuna.

Mr. STUDDS. I understand that.

Mr. BUSBY. Now, if some mechanism, technical or otherwise, can be devised so that we can regulate in absolute terms the bycatch of billfish taken in the directed tuna fishery, the Department will have no problem with that.

But on the other hand, if we are going to implement a plan which has measures that have the effect of negating that directed fishery, then clearly there is an international precedent established. As to the effect on the rest of the tuna fishing interests of the United States, I think it's obvious. It is very clear that another nation could take the same kinds of measure—

Mr. STUDDS. But they already have. That's my point. My question—let me ask it again. I apologize if I've confused you.

I understand that your objections in large part—I won't say entirely. I'll leave that to you—are not addressed to the bluefin fishery and bluefin tuna in the Atlantic. You're concerned with the overall tuna industry of the country, the largest component of which, is the distant water fishery based in California.

My question was, if we were to amend the act as I have suggested with respect solely to the Atlantic bluefin, what could happen to the distant water tuna fishery based in California, what could other nations off whose shores they fish do that they have not already done for years?

Mr. BUSBY. They have done it for years, Mr. Studds, we do not recognize their right to do so, and we—

Mr. STUDDS. But we keep paying their fine.

Mr. BUSBY. We have measures in our law which are—

Mr. STUDDS. Who are we kidding? It's almost out of Gilbert and Sullivan. We go through this charade, as you know. We are the only major nation with this particular provision in our law, this kind of an exemption. We do not, and I agree with you, as you know, recognize any nation's right to assert territorial jurisdiction of 200 miles; but with respect to the assertion of fisheries jurisdiction, we're living with and paying for those assertions daily, and the diplomats argue about whether it's de facto, or de jure, but money changes hands, and people fish in the real world.

Mr. BUSBY. I must say I personally see an inconsistency in declaring jurisdiction over bluefin only. If you're going to remove the inconsistencies from our law, you should either take billfish out of it, or put all tuna under it.

Mr. STUDDS. Well, that's perfectly logical.

Mr. BUSBY. But to put bluefin only under it, is going to put us in an obviously, more untenable—

Mr. STUDDS. The Department would prefer—what would you prefer? You want us to take billfish out, or put all the rest of the—

Mr. BUSBY. We consider that to be largely a domestic fisheries management consideration; but insofar as we are charged with the responsibility for trying to protect the domestic tuna fishing industry, to put all tuna fishing under the law would remove the tools which you've given us.

Mr. STUDDS. And although that is a question for domestic policy you've just delivered yourself an opinion on. I have no objection to you—but I do have some objection to the State Department insisting that rationality be a component of U.S. policy. There's no precedent for that in either your department or ours, as you know.

Thank you, Mr. Chairman.

Mr. BREAU. Thank you.

Let me just ask you a final question about the opinion of the National Marine Fisheries Service.

We have a letter that Mr. Bill Gordon sent, as Director of Office of Research, Conservation and Management, back in August of 1979 to the South Atlantic Management Council on the point that we're talking about, being the protection of the billfish.

He stated:

I'm concerned that many persons believe that all we need to do to be able to fully manage billfish is to bring tuna under the FCMA. I can assure you that without substantial alteration of the basic principles underlying the FCMA, the inclusion of tuna would add little to our ability to manage billfish.

Is that still NMFS' position?

Mr. BLONDIN. That is, Mr. Chairman, still our position.

Mr. BREAU. Let me ask another question. NMFS did a legal memorandum on billfish management under the FCMA, in October 1979. It was to Eldon Greenberg from Jay Johnson, within the Department; and the issue confronted in the legal memorandum was,

Does FCMA as amended authorize the use in billfish fishery management plans of conservation and management measures which affect foreign longline fishing for tuna in the fisheries conservation zone.

Conclusion:

Yes. A billfish management plan may contain management measures which affect foreign longline fishing for tuna in the FCZ, including area closures, and season or gear restrictions if the measures will first provide a reasonable opportunity for foreign longline vessels to fish for tuna in the FCZ, and to impose the least burden on such vessels that will achieve conservation and management of the billfish covered by the plan.

Is that still the basic legal opinion of the National Marine Fisheries Service?

Mr. BLONDIN. That is still the basic position of the National Marine Fisheries Service.

Mr. BREAU. What the Councils do, I take it, is apply that to the plan as presented to the Department of Commerce which sees if it follows those basic parameters?

Mr. BLONDIN. That is correct. Those are the principles that are being used.

Mr. BREAU. OK, let me ask State. The other thing that we have is a letter from John Negroponte to the Billfish Steering Committee for the South Atlantic Council, dated September of last year.

This letter was on the statement I just read from NMFS. State was asked to review it, and Mr. Negroponte in September stated the Department's position as follows:

We have reviewed and concur in principle with the statement prepared by NMFS concerning the Council's management authority under FCMA with respect to billfish and their accompanying guidelines. It is the Department's understanding that the billfish management plan must, like all other management plans, conform to the standards set forth in the FCMA as a first step.

I hate to say it is probably a typical State Department opinion. It says you can manage it, but you have to have as a principal purpose of that management, the management of billfish, and not tuna management. I take it, those are probably still the general parameters.

Mr. BUSBY. That's still typically our opinion.

Mr. BREAU. A final question, how long are you going to be Acting?

Mr. BUSBY. Not too much longer, I hope, sir.

Mr. BREAU. OK.

Mr. STUDDS. Where are you going?

Mr. BREAU. Mr. Blondin, we appreciate your appearance. I think it's probably your first appearance before this subcommittee, at least since I've been chairman, and your predecessor, Dave Wallace, was a good friend, and we look forward to working with you in the future. You presented a very fine statement.

Gentlemen, thank you very much.

We'd like to welcome as our final witnesses this afternoon Mr. Jack Bowland, who is one of the national representatives of the U.S. Tuna Foundation, who I understand will also be accompanied by Mr. George Steele.

Gentlemen, we welcome you and are pleased to receive your statements.

STATEMENTS OF JACK C. BOWLAND, NATIONAL REPRESENTATIVE, UNITED STATES TUNA FOUNDATION; AND GEORGE STEELE, REPRESENTATIVE, AMERICAN TUNA BOAT ASSOCIATION

Mr. BOWLAND. Now, Mr. Chairman, my name is Jack Bowland. I'm with the United States Tuna Foundation. We're here in support of H.R. 6310. With me is Mr. George Steele, the Washington representative of the American Tuna Boat Association.

As I have provided written testimony to the committee, and as the theme of today is conservation, if we could submit my written testimony into the record, I can forgo reading it.

Mr. BREAUX. Without objection, the entire statement will be made part of the record.

Mr. BOWLAND. I would like to make one further very short and brief statement, that we do support 6310; we do support international management of the highly migratory species; and we also support the testimony that was presented by Mr. Busby and Mr. Blondin.

Naturally, Tuna would be opposed to any inclusion of management of any of the tuna stocks under the FCMA; and with that, feel free to ask us any questions that you so desire.

[The following was received for the record:]

STATEMENT OF JACK C. BOWLAND, UNITED STATES TUNA FOUNDATION

Mr. Chairman and members of the House Subcommittee on Fisheries and Wildlife Conservation and the Environment:

On behalf of the United States tuna industry, I welcome this opportunity to testify in support of H.R. 6310, a bill which will extend the authorization for appropriations for fiscal years 1981, 1982, and 1983, to carry out the Atlantic Tunas Convention Act of 1975.

The United States tuna industry applauds the introduction of H.R. 6310 as a reaffirmation of the United States juridical position on the highly migratory species and a continued willingness to work for an effective regional management regime.

The migratory nature of the tuna makes conservation of the many species and management of the extensive fisheries for them difficult. Yet conservation is particularly important as technological advances in fishing gear and methods, coupled with the evergrowing demand for tuna, continue to increase the fishing pressure on global stocks of these fish. If people all over the world are to continue to harvest tuna, effective conservation is essential. Because these fish migrate through the jurisdictions of many nations, effective conservation requires international cooperation.

In enacting the FCMA the United States was correct in its analysis that the highly migratory species, tuna, cannot be managed or conserved on a unilateral basis. This recognition on the part of the United States has been the cornerstone of our international leadership in the conservation of highly migratory species.

Tagged northern bluefin tuna have travelled 4,830 miles across the Atlantic Ocean in 119 days, a sustained journey of over 40 miles per day. The southern bluefin is just as migratory as its northern counterpart, with some tagged individuals having travelled from the coast of Australia across the Indian Ocean into the Atlantic Ocean.

To quote Martin Sarmiento, who wrote in 1757, "Tuna have no native country, nor lasting domicile. All the sea is their native country. They are wandering fish . . .".

When considering Atlantic tuna it should be noted that nearly all countries fishing tuna in the Atlantic are members of the International Commission for the Conservation of Atlantic Tunas (ICCAT). The efforts of the United States should be directed toward strengthening this organization through the broadening of its research capabilities and membership base. This is necessary if ICCAT is to become capable of carrying out its stated purpose more effectively.

If the objective of management is to maintain a stock at levels that are capable of sustaining maximum yields without a deleterious effect on the fishing, then such management must be applied to all countries fishing that particular stock. Because

Atlantic tuna travel through many juridical zones, as well as the high seas, proper conservation can only be accomplished through international management regimes such as the IATTC or the subject of this hearing, the International Commission for the Conservation of Atlantic Tunas.

The United States should be proud of its role as the world leader in the conservation and management of the highly migratory species, tuna, and should continue in this role by supporting ICCAT through passage of H.R. 6310.

Mr. BREAUX. Mr. Steele, do you have a statement?

Mr. STEELE. I don't have a statement, Mr. Chairman. I would like, with your permission, sir, to respond to some of the colloquy that has taken place previous today, if that's all right.

Mr. BREAUX. That's fine.

Mr. STEELE. I'm particularly concerned about some of the points Mr. Studds has made. Mr. Studds has engaged with various representatives of the tuna industry over the last few years in very similar discussions based on some of the very similar points of disagreement.

Let me say that I think, hopefully, it will be recognized that, really, we are truly interested in a conservation program for billfish, or for any other migratory fishes, that we can all agree that there is only way to achieve that, and that is through an international conservation regime that does not seek to conserve these highly migratory species by building artificial fences in the ocean.

Now, if we think for one instant that we can have an impact on conserving the bluefin off the Atlantic coast when we are told that the portion of that habitat over which we have control is less than 5 percent, if we were to take this position, Mr. Chairman, it is our belief that all we're doing is to invite international chaos, to invite all of the countries through which, whose waters these fish swim during a certain part of their life cycle, to go out and catch those without regard to conservation, and to take such a parochial viewpoint in insisting that we through just controlling 5 percent of the range of this fish can affect an international conservation program, I submit is not very realistic.

Now, I would also submit that there have been other fishery councils quite apart from those who have been referred to previous in this hearing—and I refer specifically to a recent action taken by the Pacific and Western Pacific Councils—the Scientific and Statistical Committee of those two councils suggested, and I think—I know the industry would support this—we further note that billfishes are highly migratory in nature and require broad international attention to assure conservation of the resources.

The Scientific and Statistical Committee of these two commissions recommends that the Council bring this view to the attention of the Secretary of Commerce with the aim of establishing mechanisms for attaining international management of the billfish fisheries.

Mr. Studds has said that we are alone. We and Japan and four other countries are alone in the recognition that the only way to effectively conserve, if conservation is what we want, is to do it on an international basis; and that we in this country or in no other countries throughout this world have the right to erect barriers in the sea that the fish will observe, and thus to conserve. And I would hope that we will move consistently forward with the recognition that is built in the FCMA that has been attested to by those

countries who have had more experience in fishing migratory species than any other countries; namely, Japan and the United States, in a manner that will truly conserve the migratory species, not only tuna, but billfish as well.

Mr. BREAUX. Let me ask the question, if international agreement is the way to manage this species, why isn't it working better in this area?

Mr. STEELE. Well, I would say that perhaps we should put more effort in this area, Mr. Chairman. The international cooperation route is one that is not as easy, but in this instance it is the only one that is available to us. As you know, we've heard criticisms, for example, on the international conservation regimes of the Interamerican Tropical Pacific Area. Now, I think that most people, while we have had problems, while we certainly have had the fines that Mr. Studds has referred to, while we certainly had the seizures, on balance, the conservation program that is intact in the Interamerican Tropical Pacific Area still stands out as one of the finest conservation programs in the resultant savings of fish than we have ever had in the history of the world's fisheries.

Now, this has required a tremendous amount of effort, a tremendous amount of expenditure of time by the Department of State, and the Department of Commerce, in the industry involved; and I would submit to you, sir, that is those people in this country who are genuinely interested in conserving billfish would cause through their Members of Congress in committees such as this, to mount on a comprehensive international billfish conservation program, I think it would perhaps be as successful as some of the successes which I insist we have enjoyed in other international conservation programs. It's not going to be easy, but in our judgment, it is the only alternative.

Mr. BREAUX. Would you state for the subcommittee's record, what is the opinion of the industry that you gentlemen represent as to what the effect would be if we took the step of placing the bluefin under U.S. management?

Mr. STEELE. In my opinion—and I'll let Mr. Bowland speak for himself—is really very much in the same way that Mr. Busby stated it.

I think that it would, quite frankly, undermine and erode forever the juridical position on which we base the ability for us to either catch or conserve all tunas.

Let me point out, that a very important part of the FCMA is the embargo provision wherein we use the U.S. market, or the threat of withdrawing that market, as the motivation for securing international cooperation for a management program for tunas in the Western Pacific.

Now, if we were to remove that, we remove the embargo provision, we remove the fishermen's protective pack, and then it's dog-eat-dog; we no longer have the ability to use the threat of taking away the U.S. market as a motivation to get other countries to enter in and to continue participation in international conservation programs.

So, I think that if we were either to do one of two things, to remove bluefin, or certainly to take and remove the tuna exemption, not only are we signing the death knell to the ability of U.S.-

based boats to catch tuna, but we are also eliminating what little bit of motivation we still have left in the international community for the conservation of all tunas.

Now, you mentioned earlier in the hearing, Mr. Chairman, you asked what percent of the tuna caught, what does that relatively speaking, amount to?

You, I know, know the tuna industry as a whole accounts for about 30 percent of all the food fish landings by volume, and 32 percent by value, and that bluefin represents——

Mr. BREAU. Thirty percent of the fish landed are tuna?

Mr. STEELE. By volume——

Mr. BREAU. And 32 percent by value?

Mr. STEELE. By value are tuna. And of that, seven-tenths of 1 percent is bluefin.

Now, really what we're talking about here, I would submit, Mr. Chairman, is truly the tip of the tail wagging the dog; and I would also point out—I'm sometimes very amused at the popular characterization of a recreational fishery, when we found out that a significant, if not most, of the giant bluefin that are caught by our recreational fishing interests in the New England area, are exported as food fish to Japan. So, I just want to make sure that the record is clear that we're not talking about sports fishermen versus commercial fishermen. We're just talking about two types of commercial fishing industries.

Mr. BREAU. Thank you, gentlemen.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Including the gulf bluefin, and let's try and use that phrase if we don't agree that there is a western and an eastern stock, would be sufficient to upset the whole Pacific Tuna Convention?

Mr. BOWLAND. I think that including any species of tuna under the FCMA would erode our position, our international position. It's one of the things that I think many of the countries have been waiting for us to do this, so they could have a much stronger bargaining position on our international negotiations; and whether it be in one small area at all, once we include tunas, again as George said, we would lose the embargo provisions, the protection under the FPA; and basically, be hypocritical in our approach to tuna. So, you have to either include them all, or keep them all excluded.

Mr. FORSYTHE. We heard, and it's in the record today, that five U.S. boats have moved their flag to Mexico; and there have been previous transfers. Is this trend going to continue to grow even if there is no change in the FCMA regarding tuna?

Mr. BOWLAND. In the transfer of the vessels listed in the paper today—my knowledge is from the article in the paper, also—that I think what you're seeing is boatowners—Mr. Gann in particular has a large fleet, and I think that it probably has many causes behind this transfer. I think one of them is probably what is going to happen to the MMPA, what is going to happen with the negotiations in the eastern tropical Pacific; and I think when he adds them all together, he has to look at what he has invested in a fleet, and should he wait to see what happens more or less like shooting craps, or shall he get on with it and change flags now, because he might not have any faith left in what the U.S. Government is going

to do as far as protecting distant water fishery. But you would have to ask Mr. Gann. I have no idea.

Mr. STEELE. Mr. Forsythe, I'd like to comment additionally on that response.

I agree essentially with Jack. I would simply say, Mr. Gann, and I'm sure every other owner of a fleet of individual tuna boats in this country are very concerned with what they perceive to be the lack of investment in operating climate provided the U.S. Government in one instance—and I'm speaking specifically of the National Marine Service, the Fishery Service with respect to the tuna-porpoise problem; also the subject which Mr. Studds has referred to, the access problem. You are a man sitting there with a \$7 or \$8 million vessel; you see what you perceive to be not the most effective action by the Department of State in guaranteeing your access.

You see people within the U.S. Congress suggesting that maybe we do away with the migratory species exception of tuna, and maybe we do away with the Fishermen's Protective Act such as Mr. McCloskey has suggested in this very committee; you see the Director of the National Marine Fisheries Service coming out with proposed regulations which will only continue and increase the harassment of doing business as an American citizen on an American-flag vessel; you see diesel fuel approaching 90 to 97 cents a gallon; you see 20 cent diesel fuel in Mexico; you see promised unlimited access in Mexico, and we all know that all the Mexicans have to do is to make a statement that they aren't going to kill any porpoises and they're going to be good boys, and they're going to apply by everything the Department of State says, "Fine, bless them," and that's all she wrote.

Now, if you, as an operator of a tuna vessel were looking at that investment in operating climate, Mr. Congressman, I think you might have the same second thoughts of Mr. Gann; and unfortunately—and believe me, I don't want to see this happen, and I know Mr. Bowland doesn't, or the organizations we represent—unfortunately, I'm afraid that Mr. Gann is only the first drop in the bucket.

Mr. FORSYTHE. Thank you.

Thank you, Mr. Chairman.

Mr. BREAUX. Do you have any questions?

Mr. STUDDS. Oh, a few.

Mr. BREAUX. Mr. Studds is recognized.

Mr. STUDDS. Thank you.

It's great to see you folks again.

Do I understand you to say that the landings of tuna constitute 32 percent of U.S. fisheries landings by value?

Mr. BOWLAND. Food fish.

Mr. STUDDS. Food fish, yes.

Mr. STEELE. We're not including industrial products.

Mr. STUDDS. Now, of that 32 percent—we're just talking about value, percentage by value—what percent are landed by the boats based in California?

Mr. BOWLAND. I couldn't answer that question—

Mr. STUDDS [continuing]. With any degree of precision.

Mr. BOWLAND [continuing]. Because our landings out—it would be very difficult. I'd have to break it out, because you're talking Puerto Rico, and San Diego, and San Pedro, and it would be—

Mr. STUDDS. Well, San Pedro and San Diego are both in California.

Mr. BOWLAND. Right, southern California.

Mr. STEELE. It's substantial in Puerto Rico, too, Mr. Studds.

Mr. STUDDS. Are we talking about over half in the California base fleet?

Mr. BOWLAND. No, I would say—with the landings, I would have to put it at probably 60, 62 percent landed in southern California, and the rest is landed in Puerto Rico. It may be a little higher than that.

Mr. STUDDS. Sixty percent, roughly, in southern California, and maybe a little higher; the rest in Puerto Rico?

So, you fellows have had some good times.

You can imagine what I'm going to say to you. I mean, you were before this committee 7, 6, 5 years ago predicting the demise of your industry if we enacted the Fisheries Conservation and Management Act. I'm surprised to see you still in business.

Mr. STEELE. Well, unfortunately, Mr. Studds, I'm afraid that we were prophetic; and I'm afraid we're getting to the point of being pathetic in—

Mr. STUDDS. Yes, but depending on what suits you, you come in here and tell us what a whopping percentage of the industry you are; and then 10 minutes later you tell us what a disaster you're in. I mean, you know, you look healthy to me.

Mr. BOWLAND. I think what we're trying to say is that we'd like to protect and maintain that—

Mr. STUDDS. Oh, I understand, I understand.

Mr. BOWLAND [continuing]. For the American people.

Mr. STEELE. And hopefully the people that consume tuna in this country would like to have that tuna caught and landed in the United States by U.S. fishermen.

Mr. BREAUX. Would the gentleman yield?

Mr. STUDDS. Certainly.

Mr. BREAUX. I think that what he is stating is that being 100 percent of a disaster is worse than being 50 percent of a disaster.

Mr. STUDDS. Yes, of course.

I had tuna for lunch, myself, today, this very day.

Let me just point out that you make my point in a certain respect.

What is the average cost of a new vessel in the California tuna fishery, the distant water fishery?

Mr. BOWLAND. We have 580 boats that we consider distant water fisheries that participate in the albacore.

Mr. STUDDS. What do the larger ones cost?

Mr. BOWLAND. The large, the purse seiners, I know those are the ones you're talking about, have to be in the neighborhood of around 8.5.

Mr. STUDDS. \$8.5 million?

Mr. BOWLAND. Yes, sir.

Mr. STUDDS. Well, when you speak somewhat derogatorily—I don't mean that derogatorily—but when you speak disparagingly of

the 0.7 percent of the catch by value, which is Atlantic bluefin tuna, have you no heart? These are not people on \$8.5 million boats. However, they are people whose livelihood depends on this. In many cases, they are extremely small operators. They do not have galleys. They do not have wall-to-wall carpeting in their staterooms. They do not have French chefs aboard their vessels. You know, it's a different kind of a world, but they are people who make a living this way.

Mr. BOWLAND. Mr. Studds—

Mr. STUDDS. They are not corporations.

Mr. BOWLAND [continuing]. I joined United States Tuna Foundation in May of 1979. I was formerly the general manager of the Western Fishboat Owners Association, which is San Diego based.

However, we represented 580 to 590 vessels from San Diego to Seattle that were basically involved in the albacore fishery, which I know exactly what you're speaking about. These are what we considered, in a way, mom and pop organizations. They might be a little larger than the east coast boats. The average size was 57½ feet, and they could carry approximately 35 tons of frozen tuna; and they basically fished for albacore. We also had 42 boats called bait boats that fished out of San Diego; they fished albacore, and skipjack and yellowfin. To a man, the people out there, the mom and pop, the small boats, they feel the same way. They do not want tunas under the FCMA.

Mr. STUDDS. Is there any foreign fishing for albacore off the coast of California?

Mr. BOWLAND. Yes, the Canadians fish off of Oregon, Washington. They fished as far south as Eureka. I assume that the Mexicans will be fishing albacore—

Mr. STUDDS. But they're not yet.

Mr. BOWLAND. Not yet, but they—

Mr. STUDDS. Does wonders to one's perspective as to whether or not one encounters foreign vessels in what one perceives to be one's own traditional waters.

Mr. BOWLAND. Oh, yes. Like I said, the Canadians—

Mr. STUDDS. OK, I guess this the long way in my way of taking quite umbrage at your beginning of your testimony by saying, "On behalf of the U.S. tuna industry—" I don't think you consulted that 0.7 percent that is in the Northeastern part of the country.

Mr. STEELE. Mr. Studds, may I respond to your inquiry?

Mr. STUDDS. Yes.

Mr. STEELE. I certainly—I want the record to be abundantly clear that I'm not speaking disparagingly at all of the seven-tenths of 1 percent. One of the points that we're trying to make is, that in our judgment, the way to insure the continued viability and the increased yields of those persons who are pursuing that seven-tenths of 1 percent is not to try to do it with control of 5 percent of the range, but to pursue an aggressive international conservation program which I think will accomplish what you, Mr. Studds, are after, and what we're after.

Mr. STUDDS. I understand what you're saying. The fact of the matter is that segment of the industry does not agree with you, and you are not speaking for them, obviously, when you say—I think you started off, Mr. Bowland, by saying "Tuna would be

opposed—" I think the record should reflect equally clear that you're not referring to this fish, themselves, when you say that; because I suspect if we polled the tuna, they would probably be in favor of less Japanese catch. So, you speak neither for the tuna in that sense, nor for the relatively humble portion of the industry which can be found in the Northeastern part of the country.

Now, how would you feel about coastal State enforcement of ICCAT regulations?

Mr. BOWLAND. No, I think that we have to have the flag countries enforce their own regulations.

Mr. STUDDS. Why is that?

Mr. BOWLAND. I think that when you start looking at having foreign enforcement on U.S. flag, or U.S. enforcement on a highly migratory species, I just don't think it's going to sell.

Mr. STUDDS. Why not if it's pursuant to internationally agreed upon regulations? That's what we supposedly did for years under various treaties, including ICNAT, for the northwest Atlantic.

Mr. STEELE. Again, I think we've been through this for these many years, and sometimes it's worked effectively; and I would agree with you, Mr. Studds, that sometimes allegedly it has not worked effectively. I can only say the one regime that I know and have been personally involved in for over 20 years is in the IATTC. I'm sure that there's probably been some slippage there; but by and large, it has been an effective program; and I do not think that it is feasible—again, we're dealing with highly migratory species, fast-moving fishing, to have to put into port, for example, and go through all the mish-mash, we get into, you can appreciate as a lawyer, the legal jurisdiction—

Mr. STUDDS. Let the record be clear, I am not a lawyer. I have enough problems defending my integrity without—

Mr. STEELE. I think you can appreciate the problems that would be inherent in each individual coastal State having jurisdiction over enforcement of an international regime; and you continue to refer to ICNAT, I think there are other international programs that have a very good record of success. I think it could be achievable if we put our minds to it on an international bill-fishery regime.

Mr. STUDDS. You realize I was not a friend of ICNAT as an example of a historic—

Mr. STEELE. Yes, I know that. I'm well aware of that, sir.

Mr. STUDDS. You're aware that the current negotiating text for the law of the sea, what it says on this subject?

Mr. STEELE. Yes, I am, sir.

Mr. STUDDS. Well, you'll be relieved to know that I agree with you that is not appropriate at this time in spite of the implied suggestion of the Department of State a few moments ago to remove the exemption for all highly migratory species, simply because the international community seems to be agreeing under article 61 that the coastal States shall determine the allowable catch of the living resources in its exclusive economic zone; simply because of that, I nonetheless agree with you that it would be at least premature at this time for us to move to do away with our entire exemption.

Mr. STEELE. We appreciate your support, sir.

Mr. STUDDS. May I point out, however, that we still didn't get your support in the 94th Congress even though we put that exemption in there; but I'm delighted to see that your predictions were wrong and that you've still got 32 percent—and I'll bet you've got even more percent of the fishery by value in this country, and you seem to be prospering in adversity. I commend you.

Thank you, Mr. Chairman.

Gentlemen, we thank you for your appearance before Johnny and Jerry show here, and look forward to working with you in the future.

With that the committee will be in recess until further call of the Chair.

[The following was received for the record:]

STATEMENT OF HON. BALDASAR CORRADA, RESIDENT COMMISSIONER OF PUERTO RICO

I wish to express the deep concern and opposition of Governor Romero and myself to the Amendment proposed by my honorable friend and colleague Gerry Studds. While he and I agree on most matters I must register my disagreement with his proposal unilaterally to place Atlantic Blue Fin Tuna under U.S. management in our 200 mile control zone.

As is well known, the Fisheries Management Control Act specifically places tuna as a highly migratory species, under international management. Unilateral action could, and probably would, lead rapidly to other countries placing yellowfin, skipjack and other tuna under exclusive management while migrating through their own 200 mile zones. In turn, this action would lead not only to additional restrictions on U.S. vessels fishing in foreign zones, but to multiplied seizures of our vessels.

Pursuant to the Fisheries Management Protection and Fisherman's Protective Acts such seizures of U.S. vessels contrary to U.S. law would require placing an embargo on imports of tuna from offending countries.

Puerto Rico is a party to current judicial hearings concerning new regulations proposed to halt U.S. and foreign purse seiners from setting on northern offshore spotted porpoise to catch yellowfin tuna. We have urged reconsideration of the scientific findings and proposed regulations to assure continued fishing as well as satisfactory protection for this porpoise stock, which is increasing.

Our deep interest both in the proposed amendment by Mr. Studds and proposed regulations rests on the great importance of Puerto Rico's tuna canning industry to employment, income and production on the Island.

There are now three tuna packing plants in Ponce and four in Mayaguez belonging to five U.S. companies. A total of 6,459 people are employed and this represents 42 percent of all manufacturing and employment in Puerto Rico. As you can see from the table below, tuna canning employment totals 1,937 out of 13,800 in Ponce manufacturing and 4,612 out of 13,900 people in Mayaguez manufacturing.

City	Population 1976 average	Total employ- ment, November 1979	Manufactur- ing employ- ment, 1979	Tuna canning employment, October 1979		Unemploy- ment, January 1979 (percent)
				Total	Female	
Ponce.....	279,200	57,300	13,800	1,937	1,050	16.8
Mayaguez.....	149,600	41,400	13,900	4,612	2,561	10.7

The annual payroll is now \$44.7 million and hourly earnings average \$3.74. In 1978, according to the NMFS Processed Fishery Products Annual Summary, the value of Puerto Rico's production of tuna canned for human consumption, pet food, fish meal and oil was \$587.5 million representing more than 10 percent of our shipments to the U.S.

Our tuna cannery represent 40 percent of U.S. production. Our annual capacity is 297,000 short tons. The factories are operating 28 percent below capacity because of current raw material shortages, which we hope represent only periodic world-wide fluctuations. In 1979, landing in Puerto Rico of light and white meat tuna totaled 223,454 short tons. Of this 51,575 short tons was white meat albacore tuna (almost entirely from foreign sources) and 180,879 tons was light meat, 67 percent imported and 33 percent from U.S. domestic landings.

It is clear that any action which threatens an assured supply of raw tuna threatens our canning industry.

As Mr. José R. Madera pointed out in his March 1980 written testimony for the Judicial Hearings (which is attached), even a 20 percent reduction in raw material would severely curtail plant utilization, reduce employment by 1,300 jobs and probably force the closure of two out of seven plants. Greater reductions in supply would threaten additional plant closures. Curtailment of Puerto Rican production will sharply reduce canned tuna supply to U.S. consumers, increase prices and further exacerbate the U.S. inflation. Continued raw materials restrictions could mean the end of the tuna canning industry in Puerto Rico.

Considering the current 17 percent unemployment rate in Puerto Rico and the need both to avoid further unemployment and rapidly to increase employment opportunities, I strongly urge the Committee to reject my honorable colleague's proposed amendment to place Atlantic Blue Tuna unilaterally under U.S. management.

STATEMENT OF JOSE R. MADERA

My name is Jose R. Madera. I am the Administrator of the Puerto Rico Economic Development Administration, known as FOMENTO. This is the agency of the Government of Puerto Rico responsible for carrying out our industrialization program, the highest priority program aimed at reducing unemployment, increasing skill levels, and in turn, income levels of our workers.

I appear on behalf of the Commonwealth of Puerto Rico:

(1) To explain the context, history, fundamental problems and current circumstances concerning Puerto Rico's economic development including continuing severe unemployment, and the great importance of viable tuna industry to Puerto Rico and the United States.

(2) To urge careful reassessment of the August 1979 Study of Porpoise Stocks (S.O.P.S.) workshop results which indicate the depletion of northern offshore spotted porpoise stocks, in order to avoid a possible premature or incorrect regulatory decision based on uncertainties in scientific data and their interpretation.

(3) To point out that if NMFS finds that foreign purse seiners are fishing on porpoise for yellowfin tuna contrary to U.S. regulations, findings and foreign certification, it must halt yellowfin import shipments originating in non-complying vessels or countries, thus reducing industry supplies.

(4) To point out that a shift toward school fishing within 200 miles of foreign shores could lead to additional seizures of U.S. vessels contrary to law, leading to embargoes of Tuna imports from such countries, thus further reducing industry supplies;

(5) To urge that the administrative law judge's decision and recommendations concerning the proposed regulations take into account and, to the extent permitted by law, avoid severe adverse effects on Puerto Rico and its tuna industry.

OUR REALITY—POPULATION, UNEMPLOYMENT AND NEED FOR JOBS

Our testimony is directed to the proposed changes of regulations to implement the Marine Mammal Protection Act as they affect purse seine fishing for yellowfin tuna in the Tropical Eastern Pacific Ocean.

The unique problem of employment in Puerto Rico is most sensitive because our jobless rate is triple that of the mainland U.S.A.—17.4 percent versus 5.9 percent.

Due to natural increases and changing migration patterns, Puerto Rico's population has grown rapidly. Despite our industrialization program, we continuously face the task of creating sufficient job opportunities to overcome job losses and increasing job demands. The rapid increase in population and labor force combined with the effects of the 1974-75 economic recession and rising oil prices of the last seven years have magnified our problems.

Our task is enormous even more so because of the threat of reduced raw materials supplies (Tuna) for our tuna industry.

Our tuna industry started back in 1953. As of today, it is composed of three packing plants in Ponce, and four in Mayaguez, belonging to five U.S. companies.

This industry is conforming with Environmental Protection Agency regulations and policies as well as with local governmental requirements, and had reached the size indicated below in October 1979.

Number of direct jobs:

In Ponce region	1,937
In Mayaguez region	4,612

Total	6,549
Annual payroll (million)	\$44.7
Average hourly earnings	\$3.74

TUNA SHIPPED TO THE UNITED STATES

[All figures in millions]

	Pounds	Dollars
1972 to 1973	235.1	214.0
1973 to 1974	231.6	233.4
1974 to 1975	229.4	248.8
1975 to 1976	221.3	226.3
1976 to 1977	233.6	290.7
1977 to 1978	254.8	371.3
1978 to 1979	283.9	421.5

The tuna industry in Puerto Rico provides 4.2 percent of the total manufacturing employment on the Island. The value of tuna shipped to the States in fiscal year 1979 exceed \$421 millions, or 8.3 percent of our total value of shipments to the U.S.A.

The industry's overall impact on the economy of Puerto Rico is considerable. Let us look at some facts. Net income from direct jobs amounts to almost \$44.7 million. While its importance for the Puerto Rico economy as a whole is great, it is more important for the local economies of the two home cities for the industry, Ponce and Mayaguez, third and sixth largest cities, respectively.

City	Population 1975 average	Total Employ- ment, November 1979	Manufactur- er's Employment 1979	Tuna canning employment, October 1979		Unemploy- ment, January 1979
				Total	Female	
Ponce	279,200	57,300	13,800	1,937	1,050	16.8
Mayaguez	149,600	41,400	13,900	4,612	2,561	10.7

Puerto Rico produces 40 percent of the canned tuna consumed in the U.S.A. Our production capacity is 297,000 short tons, nearly 50 percent of that of the entire nation, yet our factories are operating at 28 percent below capacity for lack of the basic raw materials—tuna. In 1979 foreign sources supplied 67 percent of our raw tuna.

Based on the National Marine Fisheries Market News Service, light meat, raw tuna imports into Puerto Rico during the last four fiscal years were as follows:

LIGHT MEAT SHORT TONS

	1979	1978	1977	1976
Domestic:				
Bluefin	555	278	217	154
Skipjack	29,351	43,422	19,836	32,650
Yellowfin-Bigeye	29,159	29,993	41,778	54,207
Total domestic	59,065	73,693	61,831	87,011

LIGHT MEAT SHORT TONS—Continued

	1979	1978	1977	1976
Foreign:				
Skipjack	88,050	112,873	75,225	76,193
Yellowfin-Bigeye	33,764	37,369	44,791	39,703

Note.—For total of foreign and all lightmeat, see appendix A, page 1.

Tuna landings of light meat (yellowfin and skipjack) by U.S. flag purse seiners represent 33 percent of the Puerto Rican 1979 tuna supply. Imports supply the 67 percent difference.

According to the NMFS Draft Environmental Impact Statement (page 25) yellowfin represent 62 percent and skipjack 38 percent of tuna caught by U.S. flag vessels in the Eastern Tropical Pacific.

ESTIMATED EFFECT OF PROPOSED REGULATIONS ON PUERTO RICO

The proposed regulation changes would affect a large percent of yellowfin and skipjack domestic landings and imports into Puerto Rico because both U.S. and foreign flag vessels must comply with these regulations. Historically, 50 percent of all yellowfin tuna comes from the Eastern Tropical Pacific. According to tuna industry estimates and 1979 data (See Appendix A, Page 5) at best U.S. flag landings could be reduced by 13 percent and imports by 7 percent for a combined reduction of 20 percent. At worst, industry expects a loss of about 40 percent of tuna supplies including more than 25 percent of domestic tuna landing and more than 14 percent of tuna imports into Puerto Rico.

We believe that only a 20 percent reduction in raw materials means that (1) plant utilization would be severely curtailed—possibly two out of seven plants could close (2) direct employment would be reduced by about 1,300 jobs, (3) shipments to the U.S.A. market would decline to \$324 millions, (4) canned tuna prices in the U.S. market would rise since Puerto Rico produces 40 percent of U.S. canned tuna.

The expected reduction in U.S. canned tuna supplies from reduced Puerto Rican production alone, could reach eight percent. This represents the minimum damage to our tuna industry from the proposed regulations. Obviously, further reductions in supply increase the likelihood of plants operating below breakeven, increasing the probability of closures and drastic reductions in employment.

Continued restrictions to our raw tuna availability could be the beginning of the end for the Puerto Rico tuna canning industry.

During the first half of 1977, the United States tuna fishing fleet did not engage in tuna fishing in a normal manner because of legal uncertainty and industry and congressional concern about federal regulations on porpoise killing. Because of this, by the second week in March, most of the United States tuna fleet returned to port. As a result, imports of tuna fish into Puerto Rico were drastically reduced from 31 million pounds in January 1, 1977, to 16 million pounds in February, and 14 million pounds in March. In April the tuna industry basically returned to normal; 33 million pounds being imported. One of our tuna plants was forced to lay off over 1,200 workers because of a shortage of raw materials. As of May 1977 employment in this industry amounted to 4,383 jobs, or 2, 411 below the December 1976 figure of 6,794.

If U.S. flag tuna vessels are driven out of the Eastern Tropical Pacific, our tuna industry will become more dependent on foreign import of raw tuna. A major point of conjecture is whether foreign caught tuna can be counted on to replace domestic imports. Restrictions imposed by the proposed regulations on foreign vessels such as certifications and technical documentation, will probably serve as a deterrent to supplying Puerto Rico.

As NMFS points out on pages 55 thru 57 of the DEIS, it is illegal to import any fish caught contrary to U.S. regulations concerning incidental taking of marine mammals during commercial fishing. It appears clear that NMFS must go well beyond finding concerning foreign fishing gear and techniques and certification to establish whether in fact countries are in compliance with U.S. requirements. If not, it appears clear that shipments originating in non-complying vessels must be halted. Absence of even an interim Inter-American Tropical Tuna committee (IATTC) management agreement is a discouraging factor concerning further progress in compliance with U.S. fishing regulations concerning yellowfin imports.

As the Draft Environmental Impact points out (Item d, page 71), supplies may be further reduced by import embargoes placed on countries seizing U.S. vessels contrary to U.S. law.

We believe that the environmental impact statement under emphasized the adverse effects of their proposed regulations on the economic life of Puerto Rico. As a minimum, twenty percent reduction in supplies could represent the loss of 1300 direct jobs, but it could very well mark the end of our tuna industry. The final loss of directly related jobs alone could rise to more than 6000.

CONCLUSIONS

Having explained the fundamental problems and circumstances effecting Puerto Rico's economic development, the continuing severe unemployment and the great importance of a viable tuna industry, I urge a careful reassessment of the August 1979 S.O.P.S. workshop results to avoid a possible premature or incorrect regulatory decision based on uncertainties in the scientific data and its interpretation.

In addition, if NMFS finds that foreign purse seiners are fishing on porpoise for yellowfin tuna contrary to U.S. regulations, it must also halt yellowfin import shipments originating from non-complying vessels or countries, thus further reducing industry raw material. This would raise prices, cause plant shutdowns, employee layoffs and reduce industry and employee purchases which would bear adversely on the public and private sectors in Puerto Rico.

It must be recognized that the deterioration of an important source of our employment would result in severe economic hardships. The proposed fishing regulations may strangle our tuna canning industry. The foregoing depressing scenarios could become a reality as a direct result of the decision reached in this proceeding based on what appears to be doubtful porpoise population estimates.

To avoid this most critical threat to our workforce, and to our socio-economic well being, we suggest that efforts be intensified to achieve international agreements among the fishing nations to adopt uniformly and as rapidly as possible proven porpoise saving techniques. We hope this will be done and that continued research of improved techniques for tuna catching be adopted, so that worldwide porpoise mortality is reduced to its lowest possible rate with due consideration of the economic impact of these regulations on Puerto Rico and the remaining United States.

TUNA INDUSTRY STATISTICS FOR THE COMMONWEALTH OF PUERTO RICO

[Landings—all sources, in short tons and percent, light meat tuna species]

	1979	1978	1977	1976
LIGHT MEAT TONS				
Domestic:				
Bluefin	555	278	217	154
Skipjack	29,351	43,422	19,836	32,650
Yellowfin-Bigeye	29,159	29,993	41,778	54,207
Total domestic	59,065	73,693	61,831	87,011
Foreign:				
Skipjack	88,050	112,873	75,225	76,193
Yellowfin-Bigeye	33,764	37,369	44,791	39,703
Total foreign	121,814	150,242	120,016	115,876
Total light meat tuna	180,879	223,932	181,847	202,907
LIGHT MEAT PERCENTAGE				
Domestic:				
Bluefin	0.3	0.1	0.1	0.1
Skipjack	16.2	19.4	10.9	16.1
Yellowfin-Bigeye	16.1	13.4	23.0	25.7
Total domestic	32.7	32.9	34.0	42.9
Foreign:				
Skipjack	48.7	50.4	41.5	37.6
Yellowfin-Bigeye	18.6	16.7	24.5	19.5
Total foreign	67.3	67.1	66.0	57.1

TUNA INDUSTRY STATISTICS FOR THE COMMONWEALTH OF PUERTO RICO—Continued

[Landings—all sources, in short tons and percent, light meat tuna species]

	1979	1978	1977	1976
Total light meat tuna	100.0	100.0	100.0	100.0

Source: NMFS Market News Service.

TUNA INDUSTRY STATISTICS FOR THE COMMONWEALTH OF PUERTO RICO

[Landings—White Meat and White Meat Tunas]

	1979	1978	1977	1976
SHORT TONS				
Light meat:				
Domestic	56,065	73,693	61,831	87,021
Foreign	121,814	150,242	120,016	115,896
Total	180,879	223,935	181,847	202,907
White meat:				
Domestic	12	3	2	2
Foreign	57,563	64,433	48,436	47,252
Total	57,575	64,436	49,438	47,254
Combined	232,454	288,371	230,335	250,161

PERCENTAGE				
Light meat:				
Domestic	25.4	25.6	26.8	34.8
Foreign	52.4	52.1	52.1	46.3
Total	77.8	77.7	78.9	81.1
White meat:				
Domestic				
Foreign	22.2	22.3	21.1	18.9
Total	22.2	22.3	21.1	18.9
Combined	100.0	100.0	100.0	100.0

Source: NMFS Market News Service.

TUNA INDUSTRY STATISTICS FOR THE COMMONWEALTH OF PUERTO RICO

[Landings of light meat tuna by purse seine; vessels—domestic and foreign; 1979 estimate in short tons]

	Tons	Light meat percentage	All meat percentage
LIGHT MEAT			
Domestic landings	64,065	32.7	25.4
Foreign imports:			
Estimated purse seine	33,580	18.6	14.4
Others which may include some purse seine landings	88,234	48.7	38.0
Total	185,879	100.0	77.8
WHITE MEAT			
Domestic landings	12		
Foreign imports	61,663		22.2
Total	61,675		22.2
All species	232,454		100.0

Tuna Industry Statistics for the Commonwealth of Puerto Rico

[Tuna and byproducts processing; employment and value of processed products 1978]

Employment for year 1978:

Total for all establishments in Continental United States, Hawaii, American Samoa, and Puerto Rico.....	67,221
Puerto Rico only	6,837
Puerto Rico percentage of total	11.95
Value of production 1978: Puerto Rico.....	\$387,478,000

Source: Processed Fishery Products Annual Summary 1978—Current Fishery Statistics No. 7803.

Tuna industry statistics for the Commonwealth of Puerto Rico

[Worst case/best case under proposed porpoise regulation]

Worst case—loss of purse seine production:

1a. Loss of domestic purse seine landings representing percent of 1979 production	25.4
1b. Loss of foreign purse seine shipments representing percent of 1979 production	14.4

Total loss of raw material	39.8
----------------------------------	------

2. Year-round employment 6,837 x 39.8 percent (1978) equals.....	2,721
--	-------

3. Value of shipments (1978) \$687,478,000 x 39.8 x 90 percent equals \$210,435,000.	
---	--

Best case—loss of 50 percent of purse seine production:

1a. Loss of 50 percent of domestic purse seine landings	12.7
1b. Loss of 50 percent of foreign purse seine shipment.....	7.2

Total loss of raw material	19.9
----------------------------------	------

2. Year-round employment 6,837 x 19.9 percent equals	1,361
--	-------

3. Value of shipments 687,473,000 x 19.9 percent x 90 percent equals \$105,217,000.	
--	--

[Whereupon, at 3:35 p.m., the subcommittee was adjourned subject to call by the Chair.]

ATLANTIC BLUEFIN TUNA CONSERVATION OVERSIGHT

THURSDAY, MAY 1, 1980

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, D.C.

The committee met at 2:23 p.m., in room 1334, Longworth House Office Building, Hon. John M. Murphy, chairman, presiding.

Present: Representatives Murphy, Forsythe, Anderson, Studds, Breaux, Oberstar, Hughes, Donnelly, and Evans of Delaware.

Staff present: Ned P. Everett, George J. Mannina, Jr., Martin D. Howell, and Bernard Winfield.

The CHAIRMAN. The committee will come to order.

We have assembled here this afternoon a number of experts representing the Department of State, the Department of Commerce, sports fishermen, commercial fishermen, the tuna industry, and the public. The experts assembled represent every facet of the tuna fishing industry.

The tuna issue is a broad one and in considering this issue we must realize there are 13 different species—ranging from the *thunnus alalunga* or albacore, to the *auxis rochei* or bullet mackerel. Somewhere in between these two is the species with which our hearings are concerned today, the bluefin tuna—specifically the northern bluefin tuna or *thunnus thynnus*.

The northern bluefin tuna is found in subtropical and temperate waters of the Atlantic and North Pacific Oceans and the Mediterranean and Black Seas. Commercial surface fisheries exist in the Eastern and Western Atlantic and Pacific and in the Mediterranean and Black Seas. This species is of major recreational importance in the Western Atlantic where giant tuna are sought and are highly prized as trophies. Any fish over 300 pounds is considered to be a giant and the world all-tackle record is a 1,235 pound bluefin tuna taken in 1978 off Canada. Very nearly all of these giants taken in the recreational fisheries off the east coast of the United States and Canada are sold and air shipped to Japan where they are considered to be a premium fish for sashimi.

The committee has been deluged with correspondence ranging from postcards to dissertation urging me and the members of this committee either to support or to oppose what is known as the Studds amendment to H.R. 6310, legislation to authorize funding for 3 additional years of the International Convention for the Conservation of Atlantic Tunas (ICCAT). This amendment, which was considered and rejected by our Subcommittee on Fisheries and Wildlife Conservation and the Environment, chaired by Mr. Breaux, would make a permanent change to two acts, the Atlantic

Tunas Convention Act and the Fishery Conservation and Management Act of 1976, the so-called 200-mile law. The amendment would have the effect of bringing the northern bluefin tuna or *thunnus thynnus* under the control of the United States while it is in the 200-mile zone of the United States.

The advocates of the amendment propound that ICCAT has not worked; that the Atlantic bluefin tuna is not being properly managed; and the only way U.S. recreational and commercial fishermen are going to be able to get their fair share of the catch each year is to have the bluefin tuna managed by U.S. authorities while it is in our waters. On the other hand, the opponents of the amendment contend that the bluefin tuna is a highly migratory species which migrates all over the Atlantic Ocean; it commingles with other species of tuna which make it impossible to manage one species of tuna without managing all species; that such highly migratory species can be effectively managed only pursuant to an International Convention such as ICCAT; and that for the United States to manage the species unilaterally while it is only in the 200-mile zone of the United States is unworkable and will eventually lead to the demise of ICCAT, and the bluefin tuna.

In further explanation of this unique fishery, I should also point out that the bluefin tuna catch is only seven-tenths of 1 percent of our total tuna catch by value. Also I should point out that only 5 percent of the habitat of the Atlantic bluefin is in the U.S. 200-mile zone and only about 15 percent of the Atlantic bluefin are harvested in our zone. Nevertheless, the bluefin tuna is of tremendous importance to American fishermen, especially those of us living on the Atlantic seaboard. My children and I have had many pleasant excursions off the coast of New York and New Jersey wherein we caught the bluefin tuna. I am proud to claim skippers of these recreational boats as my close friends.

I know from my discussions with them and from statistics which have been furnished to this committee that there has been a tremendous decrease in the northern bluefin tuna populations in the North Atlantic. In the Eastern North Atlantic region alone, over 150,000 giant bluefin tuna were taken annually in the peak years during the mid-1950's. In contrast, annual catches plummeted during the early seventies to only 1,800 fish.

The Western North Atlantic bluefin fishery declined drastically through the 1960's and 1970's allegedly because of the shift of the Japanese long-line tuna fishery from the Eastern to the Western Atlantic and Gulf of Mexico areas.

An obvious focal point of our investigation and one of the points on which we want to concentrate during this hearing is the effect the Japanese long-line fishery is having on bluefin. This Japanese fishery began in the Atlantic during 1956. In the early years, the Japanese catch averaged only some 2,000 fish a year. In the years 1962 to 1965, the catches averaged about 60,000 fish per year. Obviously these tremendous catches could not but decrease the tuna populations especially when one notes that a majority of these catches in the mid-1960's and in recent years were taken from the Northwest Atlantic.

The reasons for the decreases in tuna populations is further compounded by the fact that the scientists have not yet agreed

whether in fact there is one, two, or even three stocks of bluefin tuna. It is most important that this determination be made since remedies to be taken will depend on habitats, migratory patterns, traditional fishing practices, and the number of stocks involved. Evidence I received from a visiting group of Norwegian fish experts indicated that of fish tagged in the North Atlantic, many had been picked up off the coast of Norway, thereby adding to the credence that it is one stock and not two or three.

Simply put, the situation is complex and there are no easy answers. While I do not wish to preside over the demise of the U.S. distant water tuna fishing industry, certainly as chairman of this committee, I will not preside over the demise of the beautiful bluefin tuna, which is not only a great sportfish, but a world recognized delicacy. I am expecting to get many answers to this seemingly insolvable problem from you gentlemen who will present testimony here today.

On the other hand, the committee does not presume that these experts have all the answers and will welcome continued participation by the American people. The consumer, the sports fishermen, the commercial fishermen and cannery workers—all have valid considerations and vital interests in the issue we are considering today. With their interests in mind, let us proceed to get the facts which hopefully will provide the members with the best evidence available and recommend solutions to the many problems facing the bluefin tuna industry.

After sifting through and studying this information, I am confident that the committee will be able to make a determination with respect to what action will prove best for all concerned.

I might say we are under very short time constraint. We must have all our authorization bills finished by May 15. We are scheduled in this committee for a May 6 markup. So that is the time constraint we are working on. That is why I called this special hearing today on May 1 so that we could have this final evidentiary hearing before we move and, hopefully, the evidence that we receive today will assist us in making the best possible rationale for our solution.

I would like to yield to Congressman Breaux at this point, the chairman of the Subcommittee on Fisheries and Wildlife Conservation and the Environment.

Mr. BREAU. Just very briefly, I would like to commend you for your statement and understanding of the complicated issues before the subcommittee.

As you pointed out, the subcommittee had a very detailed hearing on the very issue that the full committee is now hearing once again on the question of whether we ought to include an amendment to bring one species of tuna fish under the U.S. Fisheries Conservation and Management Act.

We did not raise it at the subcommittee, but I think it is very obvious that this is not the place to discuss an issue of the magnitude of whether we ought to amend the 200-Mile Act. The legislation before the full committee at this time is an ICCAT reauthorization. Yet most of our time is being taken up with the secondary issue, which in itself is of major importance, and I think really

deserves a fuller hearing than we are able to give it under the timeframe that we presently have.

I think also the question of germaneness applies—of whether an amendment to ICCAT authorization, which amends the 200-mile zone law, is really germane to the issue. It was not raised in the subcommittee, but I think it is something that is appropriate to consider at the proper time when we start marking up the bill in the full committee.

I have always argued if this stands on its own, it is a totally different act than what we have for consideration today.

I thank the chairman for his understanding and his statement, which indicates that he understands the problem very uniquely.

The CHAIRMAN. Mr. Forsythe is the ranking minority member from New Jersey.

Mr. FORSYTHE. Thank you, Mr. Chairman.

This is a complex issue. I do have some concern as to the time constraints that we face in trying to deal with an issue as complex and having as many different facets. But I do appreciate your calling this hearing because I think it is essential that we do have the opportunity to hear those that are here today and, most particularly, our sport fishermen from New York and New Jersey.

The CHAIRMAN. Thank you, Mr. Forsythe.

Our first panel will be Mr. Louis Figurelli, who is president of the Natural Resources Protective Association, and one of my close friends from Staten Island; Mr. Stephen Sloan, the director of the American League of Anglers; and Scott Simons, Long Island Fishermen magazine.

If you gentlemen will please come forward.

Prior to their testimony, we will insert in the record at this point a statement by the Honorable Baltasar Corrada, the Resident Commissioner of Puerto Rico.

[The following was received for the record:]

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., March 24, 1980.

Hon. JOHN M. MURPHY,
Chairman, Committee on Merchant Marine and Fisheries,
Washington, D.C.

DEAR MR. CHAIRMAN: In the near future the House Merchant Marine and Fisheries Committee will be considering H.R. 6310, a bill to authorize appropriations for the Atlantic Tuna Convention Act.

It is my understanding that at that time an amendment will be offered by our colleague Gerry Studds which will have the effect of bringing Atlantic bluefin tuna under the management authority of the Fisheries Conservation Management Act (FCMA). This basically means that the U.S. would be obliged to unilaterally manage this highly migratory species.

Passage of this amendment would undoubtedly lead the renewed attempts to place all tuna under national control in the fisheries conservation zones, contrary to the intent of the FMCA which clearly specifies tuna as highly migratory and to be the subject of international agreement. Such an action could have an extremely adverse impact on the supply of tuna to Puerto Rico canneries, and in turn on the work force and income associated with that industry. As you probably know our tuna industry is a major source of jobs and income in Puerto Rico. Shipments to the U.S. during Fiscal Year 1979 were estimated at over \$400,000,000 or 8.3 percent of the total shipments to U.S. Because of the worldwide shortage of tuna, our industry is operating at less than 80 percent capacity. This impacts heavily on Puerto Rico when the February 1980 unemployment level of 17.4 percent is taken into account. Adoption of this amendment would aggravate our unemployment problem considerably.

This amendment is being opposed by a coalition of government, industry and environmental constituencies and I hope that you will take into consideration the disastrous effects that this amendment will have on the industry and on the tuna population when it is brought up for consideration.

With best wishes, I am,

Sincerely,

BALTASAR CORRADA.

STATEMENTS OF PANEL CONSISTING OF LOUIS FIGURELLI, PRESIDENT, NATURAL RESOURCES PROTECTIVE ASSOCIATION; STEPHEN SLOAN, DIRECTOR, AMERICAN LEAGUE OF ANGLERS; AND SCOTT SIMONS, LONG ISLAND FISHERMEN MAGAZINE

Mr. FIGURELLI. Mr. Congressman, I am not too much of a speaker—

The CHAIRMAN. Louis, you are a pretty good speaker.

Mr. FIGURELLI. I am a fighter.

But before—I want to do this first.

I understand, I sent a package to each one of the members of this committee of information and as of April 10, we had an ad in our local newspapers to—an ad attached which was inserted in our local newspapers requesting the public to endorse the bluefin amendment by writing to Congressman Murphy and to the NRPA. I am sorry. I am the president of the Natural Resources Protective Association.

The response was tremendous. To date, hundreds of letters have been written to the Congressman, and we of the NRPA have received over 9,000 signed petitions from this ad. The total result of this ad campaign should exceed 20,000 tally. When we tally them up, there should be about 20,000 votes in agreement with the Studds amendment and in agreement with the policies of the NRPA. I will submit these 20,000 or 30,000, whatever the case may be, as soon as I tally them up, I will submit them to this committee or to John at his office, if there is any future hearings on this so that you understand what we are trying to do in Staten Island.

In my briefcase, I could go over there and dump 4,000 on your desk now, but I do not believe it is necessary. I do have them.

Again I am not much of a speaker so you have to bear with me. Martin Howell said to me, Louis, make a speech and present it. I would rather ask questions or answer them. But I made up this speech and this is what I have.

Addressed to the Merchant Marine and Fisheries Committee on the hearing of the bluefin tuna, H.R. 6310, Studds amendment, May 1, 1980, 2 p.m., Longworth Office Building, room 1334.

I would like to thank the Federal Maritime Merchant Marine Fisheries Committee for allowing the Natural Resources Protective Association of Staten Island, Inc., to voice its opinion and offer its assistance in resolving a decision on the outcome of the bluefin tuna within the 200-mile limit of the United States.

It has been stated that six-tenths of 1 percent of all the bluefin is caught within the U.S. 200-mile limit. Why is this figure so low? Why does a valuable marketable resource such as this go unused by our own commercial fishing fleets? At the same time, foreign commercial fishing fleets are harvesting tons and tons of bluefin tuna of all sizes with complete disregard for conservation measures inside and outside the 200-mile limit.

Should the now endangered stocks increase through adequate controls and conservation measures, the percentage of fish caught in our waters would increase. Many of our own fleets would engage in fishing for bluefin tuna, improving the economic structure of our own fishing industry, both commercial and recreational sportfishing.

As a man becomes more and more dependent upon the seas for food and other life sustaining resources, he develops highly sophisticated electronic equipment, and with many new fishing fleets from foreign countries competing for these resources. The forces of nature are no longer capable of replenishing our fish stocks through natural means.

As I have stated many times in the past, we of the Natural Resources Protective Association are not against commercial fishing. We are against uncontrolled destructive fishing, without controls, when needed. Not only is the bluefin tuna endangered for the future but our economic and environmental stability is at stake.

Through qualified and authoritative reports, the bluefin tuna stocks are being depleted at an enormous rate. The laws and treaties which are now in force are inadequate, and if new laws, such as the Studds amendment, H.R. 6310, are not implemented immediately to protect the bluefin tuna within the 200-mile limit of the United States, the commercial fishing industry, the sportfishing industry, and many other boat and fish related industries will suffer drastically.

I urge this committee to vote in favor of this bill to put the endangered bluefin tuna under the control of the United States Code on the 200-mile limit immediately. It is inevitable that other nations who have not already done so will do so in the very near future.

It has been proven that the U.S. fishermen, both commercial and sportfishermen, have complied with the international treaties, quotas and laws, where other nations have not. The previous laws and treaties are proven useless and lack enforcement powers. This must be corrected.

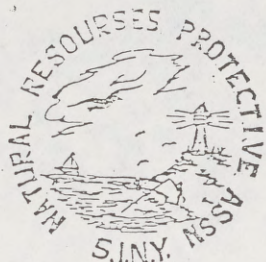
By enacting the H.R. 6310 Studds amendment into law, we could possibly induce other nations to follow our example in protecting not only the bluefin tuna but other endangered species as well. This would insure adequate stocks for the future world demands in both commercial and the sportfishing industries.

The members of this committee must realize that when the bluefin tuna are gone, the foreign fleets will leave. Or will they stay and destroy other species as we helplessly stand by?

In conclusion, gentlemen, act accordingly in the interest of the United States. We must protect our natural resources from destruction. We may in the very near future have to trade fish for oil. Will we have the fish?

Thank you.

[The following was received for the record:]



NATURAL RESOURCES PROTECTIVE ASSN. OF STATEN ISLAND, INC.

P.O. BOX 306 GT. KILLS
STATEN ISLAND, N.Y. 10308
PRES. L. FIGURELLI
TEL. (212) 967-0410

April 16, 1980

Comm. on Merchant Marine and Fisheries
1334 Longworth H.O.B.
Washington DC. 20515
Tel. (202) 225-4047

Dear *Cory John Murphy*

The documents and material enclosed has been sent to all the members of This Committee to be studied.

We of the Natural Resources Protective Assn. of Staten Island Inc. and The Citizens Committee for Urban Fishing, Along with many hundreds of thousands of concerned citizens, sportsman, commercial fisherman, and Conservation Groups and organizations, urge you... all members of this committee to support the HR 63-10 Jerry Studds Amendment. This bill HR 63-10 Studds Amendment would put the Atlantic bluefin tuna within the control of the United States code on the 200 mile limit while in United States waters. This bill if passed into law would insure conservation and protective measures which are being ignored by the Foreign Commercial Fisheries. The now existing treaties and laws are inadequate and do not allow enforcement or conservation measures for now and the future. The future of our Commercial Fisheries, sportfishing and many other related industries, depends on the use of our natural resources with discretion. Overfishing without controls, when needed, has been disastrous in the past.

We are not against commercial fishing, we are against uncontrolled commercial fishing, when certain species of fish, the environment, and our economy is endangered. Bluefin Tuna and other fish are being exploited by the commercial fisheries, and if conservation and protective controls are not soon implemented, they will soon join many other species of fish and animals, such as the whales and the buffalos, which were commercially exploited, with disastrous results.

When the endangered Bluefin Tuna no longer swim our waters, the foreign fleets will leave. What happens to our fleets who cannot leave? What happens to our fish dependent industries? What happens to our sport fishing industry?

The theory and objections by the labor unions and some greedy commercial fishermen to controls and conservation measures, when needed is stupid and foolish. Without employment, without the fishing industry, without other related fishing and boating industries, there would not be a need of a labor union. THINK GENTLEMAN!!!

At the request of Congressman Murphy, I and many other concerned citizens will attend the May 1, 1980 Bluefin Tuna Hearings, which you will attend. I will try to assist and hopefully encourage this committee to implement this bill HR 63-10 Studds Amendment into law in the interest of all citizens of the United States.

We would appreciate an immediate response and reply to this letter before May 1, 1980. We are sure our goals and interests are the same as yours. Looking forward with great pleasure on our anticipated meeting May 1, 1980.

Thank you

Sincerely

Paul Figurelli
Pres. N.E.P.A. of S.I.
Lou Figurelli

Copies sent to the following:

COMMITTEE MEMBERS AND STAFF

MER. MAR. AND FISH.

COMMITTEE ON MERCHANT MARINE AND FISHERIES

1334 LONGWORTH HOB _____ 225-4047

John M. Murphy, N.Y., Chairman

Thomas L. Ashley, Ohio
John D. Dingell, Mich.
Walter E. Jones, N.C.
Mario Biaggi, N.Y.
Glenn M. Anderson, Calif.
E. (Kika) de la Garza, Tex.
John B. Breaux, La.
Gerry E. Studds, Mass.
David R. Bowen, Miss.
Carroll Hubbard, Jr., Ky.
Don Bonker, Wash.
Les AuCoin, Oreg.
Norman E. D'Amours, N.H.
James L. Oberstar, Minn.
William J. Hughes, N.J.
Barbara A. Mikulski, Md.
David E. Bonior, Mich.
Daniel K. Akaka, Hawaii
Michael (Ozzie) Myers, Pa.
Joe Wyatt, Jr., Tex.
Mike Lowry, Wash.
Earl D. Hutto, Fla.
Edward J. Slack, Fla.
Brian J. Donnelly, Mass.

Paul N. McCloskey, Jr., Calif.
Gene Snyder, Ky.
Edwin B. Forsythe, N.J.
David C. Treen, La.
Joel Pritchard, Wash.
Don Young, Alaska
Robert E. Bauman, Md.
Norman F. Lent, N.Y.
David F. Emery, Maine
Robert K. Dornan, Calif.
Thomas B. Evans, Jr., Del.
Paul S. Trible, Jr., Va.
Robert W. Davis, Mich.
William Carney, N.Y.
Malvin H. Evans, V.I.
Pres. James Carter
S.P.A., Washington D.C., Don Costle
National Geographic
TV and News Networks
Gov. Hugh Carey
Red and Gun Editors of New York
Sierra Assn.
CZ.M. Program Washington D.C.



NATURAL RESOURCES PROTECTIVE ASSN.
OF STATEN ISLAND, INC.

P.O. BOX 306 GT. KILLS
STATEN ISLAND, N.Y. 10308
PRES. L. FIGURELLI
TEL. (212) 967-0410

March 18, 1980

House of Representatives
Congressman John Murphy
Rayburn House Office Building
Room 2187 Washington DC 20515

Dear Congressman John Murphy,

I would like to thank you and your staff at your Staten Island office for your concern and prompt attention to a bill introduced by Jerry Studts reauthorization bill on federal regulation on Blue Fin Tuna (Bill no. H.R. 63-10) (1-C.A.T.). We from the Natural Resources Protective Assn. of Staten Island have requested from your office March 19, 1980 a copy of this bill to be sent to our office, to be studied by our membership and qualified marine environmentalist. Mrs. Gloria Scalici a polite, efficient member of your staff notified me that the bill (H.R. 63-10) would not be voted on 3/20/80 and would be post-poned until 3/25/80 and would possibly be post-poned again due to the lack of information.

Congressman Murphy, We of the N.R.P.A. of S.I. and of the country respect and admire any legislator in public office who would not vote for any bill, either for or against, which he does not have enough information.

In 1976 the code on the 200 mile limit became law to protect the territorial waters of our country within 200 miles of our shore. To discuss the many provisions of this law, which I am sure you would know, would be foolish at this time.

Our main concern is the topic of fishing conservation, commercial fishing, sport fishing, foreign commercial fishing and protection of many species of marine fish within these waters. Since the implementation of this law in 1976 there has been a tremendous improvement in the fish population of many species within the waters protected by the code on the 200 mile limit. Many of these species of fish (such as cod and others) would have been either completely destroyed or seriously reduced, by the uncontrolled, foreign commercial fisheries.

As stated in previous meetings with you, The N.R.P.A. of S.I. and myself, we are against commercial fishing. We are against uncontrolled commercial fishing in certain areas where certain conditions exist as to endanger a specie or the environment.

As man becomes more and more dependant upon the sea for food, he builds larger ships, larger nets and highly sophisticated electronic fish gathering procedures. This will challenge nature's ability to replenish our natural stock. If these procedures continue to go uncontrolled, and limitations on foreign commercial fishing companies and our own fishing companies is not implemented we will have many of our own commercial fishing fleets and sport fishing fleets out of business. This would have a serious effect on the employment and economy of the country.

-2-

As a representative of the merchant marine and fisheries of the United States I am sure you are aware of many problems of which I am not aware. I am aware of the reciprocal laws between the foreign nations which allows the foreign commercial fleets to fish in our waters if we are allowed to fish in theirs. When our fleets fish their waters, we must abide by their laws. When their fleets fish in our waters they must abide by our laws. Which brings us to the point of the Blue Fin regulation bill (H.R. 63-10) or federal regulation on Blue Fin Tuna. If we do not have rules, regulations and limits within the 200 mile limit, the provisions of the code on the 200 mile limit cannot be enforced or justified. I and many thousands of citizens, commercial fishermen, sportsmen, environmentalists and conservation groups believe that all species of fish and marine life within the 200 mile limit should be protected, not from use, but from abuse by not only foreign nations but also ourselves. Many of the foreign commercial fisheries have through neglect and lack of control, depleted their sources of supply within their own waters and are attempting to do the same in our waters. We must enforce the structure of the code of the 200 mile limit to prevent it happening in the United States.

It has been brought to my attention that a number of powerful labor unions are against any restrictions and rules on the commercial fishing for Blue Fin Tuna fearing unemployment and loss of business.

I cannot go along with this theory. If the Blue Fin Tuna are over-fished by us or the foreign fleets without adequate controls there soon will be nothing to fish for in the future. Not only will the fishermen lose their jobs so will the members of the labor unions.

Dear Mr. Murphy, as soon as I receive a copy of bill H.R. 63-10 to study I will send you my comments. As stated previously in this letter, if you do not have enough information on this bill, do whatever you judge to be in the interest of the citizens of the United States. Should the bill be in our interests, as we so far do believe, we urge you to support this bill.

Thank you, sincerely, awaiting your official reply.

Louis Figurelli
Pres. N.R.P.A. of S.I.

Copies sent:

Blue Fin Coalition, Steve Sloan
Member clubs N.R.P.A. of S.I.
Jerry Studds, Wash. DC
N.Y. Daily News, Jerry Kenny
Senator John Marchi
Staten Island Advance, Bill Hughes
Newark Star Ledger, Bob Duffy
Sandy Hook Marine Lab, Jack Pierce
Comm. of Merchant Marine and Fisheries, Wash. DC
Sen. Eckert, N.Y. Albany
Channel 5 News, Ben Foti

Angler News
L.I. and N.J. Fisherman
Channel 7 News
N.Y. Aslby, Guy Molinari
Aslby, Elizabeth Connelly
N.Y.S. Con. Council, Mike Dimino
American Littoral Society, Sandy Hook
National Wildlife Fed., Kenneth Kamlet
U.S. E.P.A., Don Costle
N.Y. Gov. Hugh Carey
N.Y. D.E.C. Comm. Flacke

SPORTSMAN
COMMERCIAL FISHERMAN
SPORTFISHING INDUSTRY

HELP

ENVIRONMENTAL GROUPS
RESIDENTS OF S.I.
CONCERNED US CITIZENS

PROTECT THE BLUEFIN TUNA

Do your share in helping protect the endangered Atlantic Bluefin Tuna from uncontrolled foreign commercial fishing. Lou Figurelli president of the Natural Resources Protective Assn.

Staten Island, in cooperation with the Citizens Committee for urban fishing, and other concerned citizens, groups and organizations listed below, strongly urge immediate help.

A bill known as the Studds Amendment (bill H.R. 63-10) would protect the the bluefin tuna within the 200 mile limit of the United States. The uncontrolled over-fishing by foreign commercial fleets would cease, insuring adequate stocks for our american commercial fishing fleets, sportfishing fleets and breeding stocks for the future.

There is both scientific and documentary evidence, that prove that through inadequate treaties and laws, the foreign commercial fisheries have manipulated the laws and their operations to force our commercial fishermen out of the bluefin tuna market. Having accomplished this, they have continued to harvest thousands of tons of so called excess tuna, of all sizes and weights without controls; by the United States government, within the 200 mile limit.

This overfishing and lack of control has decimated our stocks to a very dangerous level. Immediate action to protect the Atlantic Bluefin Tuna is vital. The Studds Amendment now being voted on, to become a law, is needed to stop this destruction.

As Chairman of the Merchant Marine and Fisheries Committee, of the House of Representatives, Congressman John Murphy of Staten Island, must be made aware of your feelings, and concern. Please call or write Congressman John Murphy immediately and urge him and other members of congress to support and vote for this bill (H.R. 63-10) on Bluefin Tuna. This may be our only chance to protect the Bluefin Tuna from being overfished and destroyed.

His Address

Mr. Congressman John Murphy
Rayburn House Office Bldg.
Room 2187 Wash. DC 20515

Telephone

In Staten Island (212) 981-9800
In Wash DC (202) 225-3371

If possible please send a copy of the letter you sent to Congressman John Murphy to the N.R.P.A. of S.I. P.O. Box 306 S.I. N.Y. 10308, for our records.

Anyone wishing to become a Member For Life, Send \$5.00 to NRPA of Staten Island, P.O. Box 306 Staten Island, N.Y. 10308. Membership Card will be mailed to you. Any and all donations gladly accepted.

Thank You.

Sincerely,

Lou Figurelli
Lou Figurelli
Pres. of N.R.P.A. of S.I. inc.

Supporters of this bill to date

Natural Resources Protective Assn. Lou Figurelli
Citizens Committee for Urban Fishing Steve Sloan Chairman
National Coalition of Marine Conservation
American League of Anglers
American Littoral Society Dery Bennett
Mark Sosin Sports Afield Editor
Field and Stream Magazine
New York Daily News fishing editor Jerry Kenny
Fot1 Channel 5 News
Nelson Bryant Outdoor Editor N.Y. Times
Newark Star Ledger Bob Duffy
N.Y.S. Conservation Council Harold Smith
S.I. Federation of Sportsman Mike DiMino
Rod and Gun Editors of Metropolitan N.Y. Pres. Jim Stabile



**A vote is
imminent--**



The Star-Ledger

U.S. fishing concerned with 200-mile limit

Flounder buffs should be out fishing today provided the coast isn't laced with heavy rains similar to what fell Monday night. Most party boat skippers reported good to excellent flounder catches on both Sunday and Monday.

There is virtually nothing to report on whiting. It has sure been a gusty March.

The 200-mile limit is a center of controversy again. Major U.S. fishing concerns who expanded their fleets in expectation of very big markets have been outsmarted in a number of instances. They can blame their plight on the way the limit law has been written.

The law states U.S. fishermen have first crack at available fish stocks off shore. Any stocks U.S. commercial men cannot utilize are to be declared as surplus with surplus fish stocks to be awarded to for-

SHORE
FLASHES

By BOB DUFFY



eign commercial fishermen in the form of increased quotas.

U.S. fishing fleets were expanded on the premise there was big business to be done in the export market with foreign commercial fishermen on limited quotas.

However foreign nations got smart. They quit buying fish from the U.S. This means at the moment they obviously must be doing without, but the expanded U.S. fleets in many instances can't make any money if they can't export their catch.

What happens next is

the expanded U.S. fishing fleets will have to cut back production since the big overseas market refuses to buy the fish.

Once the U.S. fleet gives up because they aren't making enough money, there becomes a big surplus of fish off shore. The way the law is written this surplus has to be given back to the foreign fishing fleets.

These fleets then can move back to our coastal fishing grounds and catch all the fish they need with their own boats, thereby cutting the profits expected by U.S. fishermen.

This law as currently on the books requiring any surplus fish to be given to foreign fishing fleets is a bad one. It not only makes the law meaningless as to the creation of fishing opportunities for our commercial fishermen but conservation of fish takes a beating. The law should be changed.

Lou Figurelli, president of the Natural Resources Protective Association of Staten Island, is complaining of another factor involving our 200-mile limit. It is the fact tuna aren't included in it.

Back in the days when the legislation was being pushed by commercial and sportfishermen there was considerable opposition to the 200-mile limit concept by the tuna lobby.

A compromise was worked out whereby tuna were to be considered as highly migratory fish and not a portion of local fish

stocks such as would be covered by the limit.

Now years later to correct this oversight, legislation has been introduced before the House of Representatives to bring the management of bluefin tuna under direct U.S. control. The bill is H.R. 63-10.

However, Figurelli says the bill is languishing before the House Merchant Marine and Fisheries Committee for lack of information as to what the bill is all about.

Lou said he received word from Rep. John Murphy that the bill wasn't moved last Thursday and the indications are there will be no committee vote taken subsequently for the same reason — lack of information.

Why this should be with all the fishing information possessed by the National Oceanic and Atmospheric Administration as well as its sub agent The National Marine Fisheries Service, is a mystery. Both agencies must have reams of information which could be provided concerning bluefish tuna.

Basically bluefin tuna are currently being regulated by international treaty. This is an extremely poor system and has been proved to be so repeatedly in the past. The National Resources Protective Association believes the fishery would be much better managed under exclusive U.S. jurisdiction — so do a lot of people.



NATURAL RESOURCES PROTECTIVE ASSN.

OF STATEN ISLAND, INC.

P.O. BOX 306 GT. KILLS

STATEN ISLAND, N.Y. 10308

PRES. L. FIGURELLI 212 967-0410

The CHAIRMAN. Mr. Sloan.

Mr. SLOAN. Ladies and gentlemen of the 96th Congress and members of the Merchant Marine and Fisheries Committee, my name is Stephen Sloan. I am a director of the American League of Anglers, the National Coalition for Marine Conservation, chairman of the Citizens Committee for Urban Fishing. As a sportsman, I am holder of four world records documented by the International Game Fish Association. I feel I represent tens of thousands of sportsmen.

I come before you to ask for clemency and mercy for a doomed magnificent specie of fish, the bluefin tuna. Unless this committee acts to put forward and pass H.R. 6310, and especially the Gerry Studds amendment, the bluefin tunas will disappear from our waters. I leave fish counts for the scientists. I leave international squabbling to our State Department. It is in this committee's hands to vote for extinction or be the savior. Our Government has spent tens of millions of our money protecting the snail darter. This specie has no commercial value. No sport value and no recreational value.

How many of you have ever caught or lost a bluefin tuna? How many of you have spent hours feeding them herring as they porpoised through a chum slick? Now, it is not a question of dollars. With one stroke of your collective pens, you can save the bluefin for our eastern sportsman and American commercial interests alike.

This historical precedent for nonaction is inculcated in our history. America the bountiful, the plentiful, America the abundant. Resources that would never diminish, never run out. Plenty of everything and, yet, 100 years later, our wildlife has been reduced from Maine to Louisiana, from the Appalachian Mountain to the Plains, the beautiful Aroostook County alagash fir trees, cut down to make masts for the British Navy and then the American Navy. Gone. Flamingos that made the sky pink, gone. Beavers which adorned the heads of American and Europeans alike, hunted almost to extinction, the passenger pigeon, the last, a zoo curiosity in 1915, the bison and buffalo almost wiped out, and now only preserved by careful herding. Brook trout gone from all but the remotest rivers.

Atlantic salmon that once swarmed up the Connecticut Rivers, that farm and factory workers threatened a strike if the fish were not removed from their menus.

Must we allow this valuable resource to become the equivalent of Emperor's diet of humming bird tongues. The bluefin is a prime source for sashimi, a delicacy sold for \$15 to \$20 a pound in Japan. Is it too much to ask less than one-half of 1 percent of the Japanese population to forego this epicurean delight in the name of conservation, the American sportsman and common good sense?

Where will the members of this committee be when the last tuna is no more. Will your children or grandchildren go to the Smithsonian and gaze on a tuna's countenance stiff as a board, stuffed and mounted on that institution's wall or with the vote of this august committee, will you be able to send those children to see these fish swimming?

Bar Harbor, Ipswich Bay, Gloucester, Block Island, Montauk, Barnaget, the Delaware Canyon, Hatteras, or the Straits of Florida to see or catch these magnificent fish. Perhaps with prudent management, they will again appear off Santa Catalina on the west coast.

We first must protect this resource and then manage that protection. I implore you to pass H.R. 6310 in the name of American sportfishermen now, and in the name of future generations to come.

Thank you very much.

The CHAIRMAN. Mr. Simons?

Mr. SIMONS. Yes, Mr. Chairman and members of the committee, my name is Scott Simons and I live in Montauk Point on Long Island, N.Y., which many consider to be the sport fishing capital of the world. I am the editor of the Fisherman Group of publications, which consists of the Long Island Fisherman, the New Jersey Fisherman, and the New England Fisherman. These weekly magazines have a combined readership of almost a quarter of a million recreational sport fishermen in the Northeastern United States. Having worked in this capacity for the past 7 years, I am naturally quite familiar with the recreational sport fishery for bluefin tuna in this area, whose future is the focal point of the hearings being held here today.

But the fact of the matter is simple: the bluefin tuna is in great danger, and unless immediate action is taken by this committee to properly manage and conserve the remaining bluefin tuna stocks, we may fast be approaching the day when the last member of this magnificent game fish will see the inside of a can, or be served in a Tokyo restaurant.

The bluefin tuna is on the brink of becoming a memory, because the stocks of the species have been overfished and exploited by a tuna fishing industry that has no concern for the future of this great natural resource. Historically, the bluefin tuna fishery in the western Atlantic was primarily recreational fishing with rod and reel. None need only look to the landing statistics for the species in the 1930's, 1940's, and 1950's for evidence of this. Or look to the names of the few remaining fishing clubs of that era to see where the thrust of the sport fishery lies: The Sheepshead Bay Tuna Club, the Freeport Tuna Club, the Babylon Tuna Club, the Bay Shore Tuna Club. In those days, bluefin tuna were not held in much esteem as a food fish, so there was very little commercial fishing pressure on the stocks—and except for an occasional trophy fish, most of the bluefin caught by recreational fishermen were tagged and released. To this day, most of the available data on the bluefin tuna is a result of these tagging efforts by sport fishermen.

Recovery of these tagged fish was always a bit of a problem, given the nature and limitations of fishing with rod and reel. But this problem was quickly solved when purse seine vessels, formerly from the west coast, entered into the fishery in 1958. The catches of these vessels reached a peak in 1963 when over 11 million pounds were landed.

It would be interesting to note what the percentage of the bluefin tuna landings were in 1963 as opposed to the 1979 figure that was just given recently.

Shortly after that time, bluefin tuna became more and more scarce, catches declined, and an imbalance of the stock structure became evident. By the mid-1960's, the number of bluefin left was so insignificant that it was no longer economically feasible to fish for them commercially, so most of the purse seine fleet departed to fish "distant waters."

I think we should keep in mind when people start talking about distant waters at these hearings, as to why they happen to be fishing distant waters, it is because they fished out the bluefin tunas that we had in our own waters, much as the Japanese are fishing in our own waters. All right.

The architects of this disgrace are the same interests that will testify before you today and cry that if the bluefin tuna is brought under the FCMA they will be hurt economically.

But what of the economic damage they wrought to the recreational fishing industry of that era? When their work was done, the recreational fishery for bluefin tuna collapsed—and we now have two entire generations that have come of age not knowing what it is to catch one on rod and reel.

When Congress passed the Fisheries Conservation and Management Act in 1975 it went on record that America would no longer abuse its great national fisheries by treating it as an unlimited resource. You recognized that the number of fish on our Continental Shelf are no more unlimited than the trees in our forests, or the oil in the ground. You recognized that limited as it may be, our fisheries are a renewable source that, if properly managed and conserved, may continue to provide both a recreational outlet for our citizenship and support a commercial industry simultaneously.

Yet, for reasons well known to all who hear me today, the tunas were exempted from the FCMA. Although we could institute a management plan on our domestic tuna fishery within the 200-mile limit to protect the species while the stocks are rebuilt, this exemption has meant that the United States could not manage the foreign catch of bluefin tuna in our waters.

As a result we cannot, in fact, manage the species at all. For example, in 1979 the National Marine Fisheries Service placed a quota on the handline fishery of 270 giant bluefin tuna, for the area south of Gay Head Light. This quota applies to all fish taken by rod and reel, handlines, and harpoon.

But at the same time we are placing such stringent quotas on our own domestic sport and commercial fishermen, Japanese longliners were taking over 8,000 of the prespawning giants in the Gulf of Mexico.

To compound the management problem even further, there is the uncounted and uncontrolled Japanese catch of school bluefin tuna from Georges Bank to Cape Hatteras. Further damage to both our sport fishery and domestic commercial fishery is created by the uncontrolled "bycatch" of thousands of billfish that are slaughtered each year by the Japanese longliners, incidental to catching the bluefin tuna.

Management of the bluefin tuna stocks under these conditions is impossible. The solution to this problem is simple: vote yes for the Studds amendment—H.R. 6310—which would amend the FCMA to extend U.S. jurisdiction to include the Atlantic bluefin tuna. Pas-

sage of this legislation will not mean that the Japanese will no longer be able to fish for tuna in our waters. Nor would it mean that we could no longer actively participate in ICCAT. Passage of this legislation would simply mean that we will be capable of conserving and managing the stocks of bluefin tuna—as they must be, before it is too late.

Gentlemen, when others testify before you that they must be allowed to continue catching tuna to fulfill the protein needs of the Nation, remember the line item in the Federal budget that bestows on our farmers millions of dollars not to grow soybeans, one of the most protein rich foods that nature has provided us with.

When others testify before you that they must be allowed to exploit the remaining tuna stocks so that the poor may be fed, remember that the giant tuna caught by the Japanese retails for \$20 to \$25 a pound in Tokyo. That is not feeding the poor people.

When others come before you and testify that they are conservative minded people, remember that these are the same people who exploited and destroyed the fishing in their own waters decades ago; the same people who slaughter thousands of porpoises every year because these mammals are consuming the squid that they want to catch and sell; the same people who continue to hunt whales, despite the outcries of conservationists and governments the world over.

And finally, when others such as myself testify before you and ask that you save the bluefin tuna for future generations, remember that on the east coast there are 14 million sport fishermen who would just as soon be fishing for giant tuna rather than voting this November 4—but they may not have a choice. If the present quotas have been filled, or the last of the bluefin tuna have been caught as a result of the inaction of this committee.

Thank you.

The CHAIRMAN. Thank you, gentlemen. Please remain seated while we ask a few questions.

Mr. Figurelli, would you support a moratorium on the taking of bluefin tuna in the U.S. waters until the stocks are judged replenished?

Mr. FIGURELLI. Yes, I would.

The CHAIRMAN. A moratorium by everybody?

Mr. FIGURELLI. By everybody. Let us find out exactly what is going on.

Mr. SIMONS. Mr. Chairman?

The CHAIRMAN. Mr. Simons, please respond.

Mr. SIMONS. I would like to address the same question.

Sportsmen in our area would support a moratorium for everybody not to catch bluefin tuna until we could see definitely where we are going.

The CHAIRMAN. We have generally conceded, and I use the figures of the Japanese, and I am sure there are other countries, as you know, ICCAT has 19 signatory countries to it. We saw the catches in the Eastern Atlantic back in the fifties, of 150,000, and then we come in as those stocks were depleted, to the Western Atlantic, and we wonder, without an international control, how do we unilaterally manage to save this fish? It seems to me that if we

do not regulate internationally we are just going to have people outside the 200-mile limit making the catch and the take.

Mr. FIGURELLI. Can I answer that, John?

The CHAIRMAN. Sure.

Mr. FIGURELLI. Congressman.

John, we have geese, we have wildfowl that migrate across our country. They fly inside the 200-mile, they go to Europe, they go to Florida, wherever they go. This point about we are not able, or should not be able to control migratory animals is ridiculous.

As a goose flies to each State, each State has certain laws to either protect that animal, or to allow the shooting. So as long as those fish are in our waters, within the 200-mile limit, and we do have the authority to protect that fish, or to fish for it, according to what we believe is right—if we do not want to fish for it, and it is an endangered species, and we say we are not going to fish for it, to allow it to flourish, that is our business. If we do not want to catch it, we do not have to.

But, in turn, under the ICCAT Treaty, that if there is an excess, and if we do not take it, that we have to give it to somebody else, is wrong. If we do not want to take it, and if we do not want to use it, and we want to allow it to increase our future stocks, at our own discretion, why should we not? If there is a quota, and we have quotas? When we do not take our quota, why should we allow the other countries to take it? Why do we not allow it for our own conservation measures, to allow it to flourish?

That part that you said about the 200-mile limit, there is not much that we can do outside the 200-mile limit, unless as I stated in my speech, maybe we could get an example, the United States could serve it, maybe adequately get the stocks built up, to increase for the sports fisherman, and for the commercial fisherman, and maybe the other countries will wise up.

I am blunt, but that is the way I feel. We cannot do much outside the 200-mile limit, but we damn sure in hell can do something inside the 200-mile limit, and that is what we should do. I agree with you, when the people, there could be better amendments, that could be better than Gerry Studds, but at this particular time, let us implement, get it in. We at least put an endangered species, the bluefin, under our control.

If later on we have to add another fish to it, when necessary, I am not against commercial fishing. I am against uncontrolled destructive fishing.

We have no alternative outside the 200-mile limit. Inside the 200-mile limit we do have something. We could control it. We have laws. Right now we are helpless. The laws of, I believe ICCAT, the place that we are talking about, are useless. They have been proven useless. What good are they, if ICCAT is only good if we all agree together, all the nations?

John, let us make an example. Let us protect our bluefin tuna, let us get them back, get them to flourish again. I hope we can.

The CHAIRMAN. Louis, is the bluefin an endangered species?

Mr. FIGURELLI. From what I understand, yes. If they continue on the track that they are now, I am sorry, I have got to go along with them, John.

The CHAIRMAN. Mr. Simons, how do you feel about the question of a moratorium, and whether or not the bluefin is an endangered species?

Mr. SIMONS. Nothing was ever lost by having a moratorium. That is playing it safe. Why not play it safe for a change? Why do we always have to wait until the species, or animal, is down to a dangerous level before we do something about it? I am for a moratorium 100 percent.

The reason I am supporting the Studds' amendment, I think it is a good compromise at this period of time. Originally we wanted all the tunas under the 200-mile act, but due to the various political factors, that is an impossibility.

We are willing to bend. We are willing to say the bluefin is important to the conservation industry, let us concentrate on that one. Some people may say we want to stop it because sports fishermen want to catch more bluefin tuna. That is not true.

We will go to a moratorium, not to land tuna. Before the Japanese entered our waters and started paying \$1 a pound for bluefin tuna, nobody caught bluefin tuna. Unless for macho, to have a photograph taken, and to have it mounted. Almost all of our bluefin tuna in the past were tagged by sports fishermen, and that is still, I believe, the bulk of what their data base is for the inter-ocean tagging that you are talking about, was based on very few fish that traveled, there is a little intermingling there, but those were fish that were tagged by sports fishermen. We are all for a moratorium.

The CHAIRMAN. Mr. Breaux?

Mr. BREAU. No questions.

The CHAIRMAN. Mr. Forsythe?

Mr. FORSYTHE. No questions.

The CHAIRMAN. Mr. Donnelly?

Mr. DONNELLY. No questions.

The CHAIRMAN. Excuse me, Mr. Oberstar?

Mr. OBERSTAR. No, I have no questions.

The CHAIRMAN. We hope to get some of those bluefins up in the Great Lakes.

Please stay for the rest of this hearing, because we have a lot of evidence that will be coming out.

Mr. FIGURELLI. Thank you.

The CHAIRMAN. The next panel is Morris Busby, Acting Deputy Assistant Secretary for Oceans and Fisheries Affairs, Department of State and, Terry Leitzell, Assistant Administrator for Fisheries, National Marine Fisheries Service, NOAA, Department of Commerce.

Mr. Busby?

STATEMENTS OF PANEL 2 CONSISTING OF MORRIS BUSBY, ACTING DEPUTY ASSISTANT SECRETARY FOR OCEANS AND FISHERIES AFFAIRS, DEPARTMENT OF STATE; AND TERRY LEITZELL, ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL MARINE FISHERIES SERVICE, NOAA, DEPARTMENT OF COMMERCE

Mr. BUSBY. Thank you, Mr. Chairman.

It is a pleasure to appear before the committee again. With your permission, I will dispense with the reading of the prepared statement which I have, which I believe has been distributed to the committee, and I will merely summarize that statement.

The CHAIRMAN. Without objection, the whole statement will be printed in the record at this point but I would ask you to address all the points in that statement in your oral presentation.

[The following was received for the record:]

STATEMENT BY MORRIS D. BUSBY, ACTING DEPUTY ASSISTANT SECRETARY OF STATE
FOR OCEANS AND FISHERIES AFFAIRS

Mr. Chairman, I am pleased to be here today to discuss the Studds amendment to H.R. 6310, which would bring under United States fishery management authority Atlantic bluefin tuna found within the United States fishery conservation zone.

Mr. Chairman as you are fully aware, the U.S. has many competing fishery interest, and it is not easy to arrive at balanced positions. Pursuit of our domestic fisheries interests often creates problems internationally. Many nations perceive contradictions in certain of our fisheries policies, policies which are of necessity designed to protect all our fisheries interests while being acceptable internationally. This is certainly true of our tuna position. Our goal is to negotiate strong international agreements which will protect the totality of our fisheries interests, including providing the U.S. distant water tuna fleet with a predictable and viable future. We know that this cannot be an indefinite process, and that the U.S. tuna industry cannot survive indefinitely without such international agreements. However, we believe that our tuna fishermen are prepared to make the accommodations necessary for such agreements to be realized, and we are hopeful that other nations off whose coasts our fleet fishes are willing to do their part to achieve equitable international arrangements. Once effective worldwide agreements are in place, the question of expanded jurisdiction may become less critical from a negotiating point of view.

At this time, however, we believe that if the United States were to assert jurisdiction over any highly migratory tuna species it could have a confusing and detrimental effect on ongoing tuna negotiations, with particularly harmful consequences for U.S. tuna fishermen fishing off Latin America, where the vast majority of the U.S. catch is made. Further, as presently drafted, we believe the proposed legislation would place the U.S. in an untenable position in the International Commission for the Conservation of Atlantic Tuna and would make effective conservation and management of highly migratory species of tuna in the Atlantic and Gulf of Mexico virtually impossible. For these reasons, Mr. Chairman, the Department of State is opposed to the proposed legislation.

Before elaborating further on why we are not in favor of expanding U.S. jurisdiction over tuna at this time, however, I would like to note that the Department is aware that the United States does have an important interest in the tuna resources off our own coast. We are aware of the problems which have been created by the presence of foreign longliners off our shores, and of the interest of U.S. fishermen in enhancing their fishing opportunities off the U.S. coast. We are aware of the problems which have been encountered in the efforts to conserve bluefin tuna internationally. We understand and share in the frustration experienced in attempting to resolve these problems and accommodate these legitimate U.S. interests. At the same time, however, we believe that the problems can be resolved and the U.S. interests accommodated without resorting to expanded jurisdiction. The process is inevitably slower than we would like, but we simply do not believe that the problem of effective bluefin conservation cannot be handled internationally.

It is our view that, on balance, overall U.S. fisheries interests would be harmed more than helped by claiming jurisdiction over bluefin tuna out to 200 miles at this time.

As I believe you and other members of the Committee are aware, Mr. Chairman, the United States has been engaged for over two and one-half years in an effort to create a new international organization to conserve and manage the tuna resources of the eastern tropical Pacific ocean. These negotiations have proved to be very difficult, and in October of 1979 it was agreed to seek an interim regime to allow more time to negotiate a permanent new organization. We are now very close to concluding an interim agreement with the other principal nations involved.

Until now, the juridical position of the United States with regard to tuna as contained in the FCMA, and our steadfast position that highly migratory species of tuna can only be conserved and managed effectively internationally, has been an

important element in our negotiations. In fact, it has probably been a decisive factor in the progress achieved toward a new organization thus far. It is the view of the Department that a change in our juridical position at this time would have the effect of signalling the countries with whom we are negotiating that they need not make the final accommodations necessary to achieve an acceptable tuna agreement, and could make such an agreement impossible to achieve on terms acceptable to the U.S. In terms of our negotiating objectives therefore, we do not favor a change in the U.S. juridical position at this time.

The fact that the particular bill in question would only place Atlantic bluefin tuna under U.S. jurisdiction would not ameliorate the anticipated impact on our negotiations. In many ways such a change would be doubly harmful internationally. The biological characteristics and migratory habits of Atlantic bluefin tuna cannot be distinguished from those of other tunas in a manner which would rationally argue for a separate management approach. A persuasive and effective case could simply not be made to other countries justifying action to place Atlantic bluefin tuna under U.S. fishery management authority while continuing not to recognize other nations' claims with respect to other tuna species. The contradiction in the U.S. position based on the inclusion of highly migratory billfish within U.S. fisheries jurisdiction cannot really be effectively rationalized to foreign governments concerned with U.S. tuna fishing activities. A change in U.S. fisheries jurisdiction involving only one species of tuna would be virtually impossible to defend.

The Department is very strongly opposed to that section of the legislation under consideration which would amend the Atlantic Tunas Convention Act of 1975. This amendment would provide that regulations flowing from the recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT) would not apply within the U.S. fishery conservation zone. The amendment would force the U.S. to object to any ICCAT conservation measures which were not consistent with those contained in domestic management plans. United States objections would likely lead to objections by other countries and the eventual demise of the ICCAT management system for bluefin tuna.

Perhaps most importantly, the unilateral coastal state management approach underlying this particular amendment would mean, in effect, the abandonment of the long-held U.S. view that tuna should be managed internationally, regardless of the extent of jurisdiction claimed by the coastal state. It would be contrary to the position advocated by the U.S. for many years in numerous international forums such as the ICCAT, the Inter-American Tropical Tuna Commission, the Indo-Pacific Fisheries Commission, the Indian Ocean Fisheries Commission, the FAO Committee on Fisheries, and in a variety of negotiations such as those involving the tuna fisheries of the eastern Pacific and the South Pacific oceans, the Law of the Sea negotiations, and, in numerous bilateral meetings and talks. While most other countries do claim jurisdiction over tuna out to 200 miles, they also allow their national legislation to in effect be overridden by an international treaty commitment. The legislation now being considered would place the U.S. in that small minority of countries with the most extreme position on this question—a position so coastally oriented that it would make agreement to a true international conservation and management regime for highly migratory species virtually impossible.

Mr. Chairman, the Department does not wish to obstruct or frustrate legitimate U.S. interests in sound conservation of Atlantic bluefin tuna. Nor do we wish to fail in our attempts to negotiate international arrangements concerning tuna fishing which are of critical economic importance to the U.S. commercial tuna fleet. Surely an approach to bluefin conservation can be found which takes into account this balance of interests, and which does not suffer from the deficiencies found in the proposed amendment. Our achievements in ICCAT are certainly far from perfect, but we would strongly disagree with assertions that the ICCAT program has been a failure, as some advocates of expanded jurisdiction assert. The ICCAT bluefin program could be improved, and perhaps our positions in that forum should be re-evaluated with a view toward further improving the status of the bluefin stock and enhancing the long-term fishing opportunities of U.S. fishermen. The Department is prepared to work toward that end, cooperating closely with NMFS, the U.S. Commissioners, and the ICCAT Advisory Committee.

Thank you for the opportunity to comment on the proposed legislation. I would be pleased to try to answer any questions which you and other members of the Committee may have.

Mr. BUSBY. I will do that, Mr. Chairman.

I am appearing here today in opposition to the enactment of H.R. 6310.

Before elaborating on why we are not in favor of expanding U.S. fisheries jurisdiction to include bluefin tuna at this time, however, I would like to note that the Department is aware that the United States does have an important interest in the tuna resources off its coast. We are aware of the problems which have been created by the presence of foreign long-liners.

We are aware of the interest of U.S. fishermen in enhancing their fishing opportunities off the coast, and we are aware of the problems that have been encountered in trying to manage the bluefin tuna internationally. At the same time, however, Mr. Chairman, we believe that these problems can be resolved and U.S. interests accommodated without resorting to expanded jurisdiction.

We believe that enactment of H.R. 6310 would have the effect of undercutting the pursuit of our tuna policy internationally, and it would undercut some specific efforts which we have ongoing to protect U.S. fishing interests. I am sure the committee is aware that the United States has maintained for many years that highly migratory species of tuna require international management. We have pursued that as a matter of policy internationally, and it is reflected in our laws. I do not think it would be any surprise to the committee if I were to say that there is a certain contradiction in our law created by the inclusion of billfish which are highly migratory, and that that is a contradiction which we have found it difficult to live with internationally. It is thrown in our face, not only by people who might otherwise support our position, our biological position, but also by our opponents who use it in negotiations against us. In my view, to expand that contradiction at this time, to include a single species of tuna would simply be indefensible internationally.

Mr. Chairman, enactment of this piece of legislation would also have, in my opinion, a negative effect on ongoing efforts that we have to reach agreement in the Eastern Tropical Pacific on a new regime for tunafish. We have been negotiating some 2½ years now with Latin American nations to come up with a new regime to replace the IATTC. We are very close to an agreement on an interim regime for 3 years which would give us an opportunity to complete the negotiations for a new organization there.

This hearing is being held, I hope, virtually on the eve of the final negotiating session. To change our tuna position now and to change U.S. law would send an unmistakable signal to the Latin American nations that we are dealing with, and would make acceptable terms impossible to achieve.

With regard to specific aspects of the piece of legislation that is under consideration, I should point out that the Department is very strongly opposed to that section of the legislation which would amend the Atlantic Tuna Convention Act of 1975. This amendment would provide that regulations flowing from the recommendations of the ICCAT would not apply within the U.S. fishery conservation zone. While most other member nations of that organization do claim jurisdiction of tuna out to 200 miles, they also allow their national legislation to be overridden by an international treaty commitment.

The legislation which is now being considered, if enacted, would place the United States in a small minority of countries with the

most extreme position on this particular question. The position could be so coastally oriented that it would make agreement to a true international conservation and management regime for highly migratory species virtually impossible.

Mr. Chairman, as you are aware, the United States has competing interests and it is not always easy to arrive at balanced positions. Many nations perceive contradiction of our policies which are of necessity designed to protect all of our fisheries. The goal of the Department is to negotiate a strong international agreement which will protect the totality of our fisheries' interests, including providing the U.S. distant waters fleet with a predictable and viable future.

We do not wish to obstruct or frustrate the legitimate interests of U.S. fishermen interested in Atlantic bluefin tuna nor do we wish to fail in the negotiations which we have ongoing. Surely, an approach to bluefin conservation could be found which takes into account this balance of interests.

The Department is prepared to work to that end, cooperating with NMFS, the U.S. Commissioners to ICCAT, and the ICCAT Advisory Committee.

That concludes my statement, Mr. Chairman.

The CHAIRMAN. Mr. Leitzell?

Mr. LEITZELL. Thank you, Mr. Chairman.

I also would like to ask that my testimony be reproduced in full so that I can summarize it.

The CHAIRMAN. Without objection, so ordered.

[The following was received for the record:]

STATEMENT OF TERRY LEITZELL, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Committee, my statement today is in opposition to H.R. 4357, a bill to amend the Fishery Conservation and Management Act of 1976 (FCMA) to bring Atlantic bluefin tuna under the management authority of the United States within the fishery conservation zone.

U.S. tuna policy reflects the highly migratory nature of the bluefin tuna and the view that effective conservation and management of such species throughout their range can only be achieved through international regimes with the authority to ensure the application of the conservation measures in broad ocean areas. As provided in the FCMA, the exclusive management authority of the United States shall not extend to "species of tuna which, in the course of their life cycle, spawn and migrate over great distances in waters of the ocean." Tagged northern bluefin tuna have been found to travel at least 4,830 miles across the Atlantic Ocean in 119 days and are believed to be capable of undertaking journeys nearly equal to circumnavigating the earth. Making bluefin tuna an exception to the highly migratory species definition in the FCMA would create a contradiction in the U.S. position.

The United States has vigorously pursued management measures for Atlantic bluefin tuna in ICCAT. As a result of U.S. efforts, two conservation measures were approved in 1975 by the Commission and have been in effect since that time. While these measures were approved in a more general form than desired by the United States, their implementation has limited the taking of Atlantic bluefin tuna by the member countries of ICCAT. H.R. 4357, as it is presently drafted, provides that ICCAT regulations concerning Atlantic bluefin tuna shall not apply within the U.S. fisheries zone. If the United States were to reject the ICCAT conservation measures related to bluefin tuna in favor of unilateral management, the likelihood of the present ICCAT regulation limiting mortality being allowed to expire in 1982 in the eastern Atlantic would be very high. Since there is intermingling between the bluefin tuna in the eastern and western Atlantic, an absence of conservation and management measures in the eastern Atlantic would have an impact on the fish in the western Atlantic.

Although the vast majority of nations with extended jurisdiction over fisheries have included tuna in the species covered, many of these countries are not enforcing

their laws against U.S. tuna vessels. Extension of the FCMA to Atlantic bluefin tuna and the subsequent enforcement of domestic measures against foreign vessels would tend not only to undercut U.S. policy, but would also likely lead to an increase in the number of countries enforcing laws against U.S. tuna vessels. Such enforcement could affect U.S. vessels which fish for yellowfin tuna off the west coast of Africa once the open season for yellowfin tuna has closed in the regulatory area of the Inter-American Tropical Tuna Commission (IATTC) in the eastern tropical Pacific.

The addition of bluefin tuna to the species covered by the FCMA might jeopardize U.S. negotiating strategy in the eastern Pacific negotiations. The United States is currently involved in ongoing eastern Pacific tuna negotiations initiated in 1977 to develop a successor organization to the IATTC. In these negotiations, the United States has pursued continuously the goal of an international management regime, a position which would be undercut by the proposed legislation.

In conclusion, I would like to urge the Committee to oppose efforts to bring Atlantic bluefin tuna under the Fishery Conservation and Management Act of 1976. I will be pleased to answer any questions you may have.

Mr. LEITZELL. My statement today is in opposition to the Studds amendment to H.R. 6310 which would amend the Fishery Conservation and Management Act of 1976 to bring Atlantic bluefin tuna under the management authority of the United States within the fishery conservation zone.

Our tuna policy has been based on the highly migratory nature of tuna, including bluefin tuna, and our belief that effective conservation and management throughout the range of these species can only be achieved through international regimes.

Tagged northern bluefin tuna have been found to travel thousands of miles across the Atlantic Ocean in a matter of months and are believed to be capable of undertaking journeys nearly equal to circumnavigating the Earth. Making bluefin tuna an exception to the highly migratory species definition in the FCMA would create a contradiction in the U.S. position.

The United States has vigorously pursued conservation and management measures for bluefin tuna, for the conservation of Atlantic tuna. As a result of those efforts, two conservation measures were approved in 1975, which have been in effect since that time. Their implementation has limited the taking of Atlantic bluefin tuna by the members of ICCAT. The legislation, as presently drafted, would provide that ICCAT regulations on bluefin tuna would not apply within the U.S. fisheries conservation zone. If the United States were to reject the ICCAT conservation measures related to bluefin tuna in favor of unilateral management, the likelihood of the present ICCAT regulation limiting mortality being allowed to expire in 1982 in the eastern Atlantic would be very high. Since there is intermingling between the bluefin tuna in the eastern and western Atlantic, an absence of conservation and management measures in the eastern Atlantic would have an impact on the fish in the western Atlantic.

Although the vast majority of nations with extended jurisdiction over fisheries have included tuna in the species covered, many of these countries are not enforcing the laws against U.S. tuna vessels. Extension of the FCMA to cover Atlantic bluefin and the subsequent enforcement of domestic measures against foreign vessels would tend not only to undercut U.S. policy, but would also likely lead to an increase in the number of countries enforcing laws against U.S. tuna vessels. Such enforcement could seriously affect U.S. vessels which fish for yellowfin tuna off the west coast

of Africa once the open season for yellowfin tuna has closed in the regulatory area of the Inter-American Tropical Tuna Commission in the eastern tropical Pacific.

As Mr. Busby has indicated, the addition of bluefin to the species covered by the FCMA could also jeopardize U.S. negotiating strategy with regard to the tuna fishery in the eastern tropical Pacific.

In those negotiations, the United States has pursued continuously the goal of an international management regime, a position which would be undercut by the proposed legislation.

Again I would like to make clear my position that I am urging the committee to oppose efforts to bring Atlantic bluefin tuna under the FCMA.

Thank you. I will be pleased to answer questions.

The CHAIRMAN. Thank you, gentlemen.

Mr. Leitzell, in your opinion, are there one, two, or three stocks of bluefin tuna?

Mr. LEITZELL. The information on that, Mr. Chairman, is presently inconclusive, although there is clear information that there is an intermingling between the two stocks, even if they are found to be biologically—

The CHAIRMAN. You said only two stocks?

Mr. LEITZELL. I think the question is whether they are two or one.

In any case, if there are determined to be two stocks biologically, there is enough intermingling between the two that we need a regime within the entire Atlantic.

The CHAIRMAN. When was this conclusion arrived at, and what evidence did you have to arrive at that?

Mr. LEITZELL. We have not really made a firm conclusion as to whether there are two or one stocks. We have continuing research going on in that area, some sponsored under ICCAT, and some being done under other authorities within the Fisheries Service.

I can provide you further information on that, if you wish.

The CHAIRMAN. I would like to have for the record the costs, the amount of money the United States has spent, how much ICCAT has spent, and how extensive their research in this area is.

Mr. LEITZELL. I would be happy to do that.

[The following was received for the record:]

REPLY TO QUESTION

In fiscal year 1980, the United States spent approximately \$1,000,000 on Atlantic bluefin tuna research, including studies on the one stock-two stock theory.

Research programs are generally conducted by national scientists and thus funded by member countries of ICCAT. However, the Commission did fund a 6-day workshop on bluefin tuna in Santander, Spain during September 1979.

At its November 1979 meeting, the Standing Committee on Research and Statistics of ICCAT stated, with regard to the stock structure of bluefin tuna:

"Several documents which dealt with the possible separation of stocks were presented. Electrophoretic analysis of enzyme systems provided no additional information in regards to stock structure. Japanese longline data show catches occur across the Atlantic. A study based on mark-recapture data to investigate stock discreteness indicated some transatlantic interchange of juveniles. The use of parasites as biological tags suggested this. Mark-recapture data showed large fish also cross the Atlantic from west to east.

"Interchange may be either sporadic or regular. Current data indicate that interchange of juveniles is not greater than 15 percent when interchange occurs. The existence of two temporally and spatially separate spawning areas is well known. The patten of relative abundances of successive year-classes indicates differences

between east and west segments in that the 1973 year-class was very abundant in the west while the 1974 year-class was abundant in eastern waters. These latter two phenomena confirm independence of reproductive success, perhaps indicating biological discreteness. The data are not yet sufficient to provide for consensus as to whether there are one or two stocks in the Atlantic. In conclusion, it may be stated that the present evidence (which is still somewhat weak) is towards the hypothesis of separate eastern and western stocks, with a small and variable interchange of fish between them. However, the evidence is still not sufficient to reject the alternative hypothesis that there is a single Atlantic-wide stock".

The CHAIRMAN. Have concerns been expressed, at the ICCAT meetings, about this gray area of knowledge?

Mr. LEITZELL. Yes, my understanding, although I have not been a participant in those discussions, is that the question of two or one stocks has been a serious issue, discussed at length in ICCAT. Mr. Blondin, who is our Commissioner, will be on the ICCAT panel, and perhaps could expand on that for you.

The CHAIRMAN. Has the United States protested, through ICCAT, of the transfer of Japanese longline fishing activities from the Eastern to Western Atlantic?

Mr. LEITZELL. I cannot answer that question, Mr. Chairman.

The CHAIRMAN. Maybe Mr. Busby can.

Mr. BUSBY. Again, I would suggest that perhaps Mr. Blondin, and the other Commissioners could provide information. Although it is my understanding that in the ICCAT forum, that question has arisen, and we have attempted to get some satisfaction.

The CHAIRMAN. We will reserve that question for Mr. Blondin then.

Will you support a moratorium on the take of bluefin in U.S. waters?

Mr. LEITZELL. I do not believe that the moratorium is in fact necessary for the conservation of the stock at this point.

The CHAIRMAN. Is the bluefin an endangered species?

Mr. LEITZELL. No, it is not.

The CHAIRMAN. Is it impacted, or even in the marginal, or questionable area?

Mr. LEITZELL. Bluefin tuna were heavily overfished for some period of time, and the stocks very much reduced. The stocks have increased somewhat over the past several years, but I would certainly not categorize them as being either endangered or close to being endangered under the definition which is in the current legislation.

The CHAIRMAN. Why do we have this tremendous transferral from the Eastern Atlantic to the Western Atlantic of these Japanese longline fisheries? They just depleted the Eastern Atlantic stocks and moved right across the Atlantic into the waters along our coast, down into the gulf, and into the Caribbean?

Mr. LEITZELL. The Japanese have tried to find the fisheries most efficient for them. I think that is the reason that they have come into U.S. waters.

I am certainly aware of the sensitivity to that. It has caused gear conflicts in the United States, particularly in the Gulf of Mexico, and it is something which we have, within the U.S. Government, tried to work with the Japanese to solve.

The CHAIRMAN. We had the Japanese Prime Minister in for a meeting this morning. Mr. Matsuura, Councillor of the Japanese Embassy accompanied him and will be returning next week with

Mr. Yonezawa, Deputy Director General of the Ministry to see just what the Japanese are doing to react to this very severe problem in ICCAT, and particularly in U.S. waters.

Mr. Breaux?

Mr. BREAUX. Thank you, Mr. Chairman.

Thank you, gentlemen, for your statements, again on the issue.

Can we establish a moratorium on the taking of bluefin tuna, which would prevent foreigners from taking bluefin under the moratorium, without amending the FCMA?

Mr. BUSBY. No, sir.

Mr. BREAUX. Can we—

The CHAIRMAN. Would you ask that again, and get a more definitive answer again?

Mr. BREAUX. Would you explain?

Mr. LEITZELL. At present, Mr. Breaux, it would not be under our jurisdiction. We would have to amend some piece of legislation, either the FCMA or the implementing legislation for ICCAT in order to actually carry out a moratorium that would affect foreign vessels.

Mr. BREAUX. If FCMA says we do not limit tuna because it is highly migratory, the limiting of tuna would be in opposition to the law?

Mr. BUSBY. Unilateral steps.

The CHAIRMAN. Would the gentleman yield?

Mr. BREAUX. Yes, Mr. Chairman.

The CHAIRMAN. What you are implying then, is that an amendment to an authorization bill will not suffice in cutting off the question of fishing within the 200-mile zone.

Mr. BREAUX. Of course, my point is that the Studds' amendment does in fact attempt to do that. It does attempt to amend the FCMA, which would allow them to do it, but it would not be an amendment to the FCMA, which I think is nongermane at this point any way.

OK, can we devise a plan that would allow us to regulate incidental taking of billfish by Japanese tuna longliners, fishing in our zone, fishing for tuna fish?

Mr. LEITZELL. Yes, sir, and we are in the process of doing that. Billfish are regulated presently under a management plan, pursuant to the FCMA, and the five Councils from the gulf, Caribbean and east coast are in the process of putting together other plans which would regulate, under FMP's the billfish taken both in the gulf and Atlantic coast.

Mr. BREAUX. Of course, we just got the letter from the State Department that says that the first proposal to that is inappropriate, and therefore will not be accepted.

Mr. Busby, does that mean that any plan that is sent by the Council would be automatically rejected, or could a plan be devised that would effectively regulate the take of billfish by Japanese tuna longliners?

Mr. BUSBY. We would not be opposed to any plan. We are not, and I think the letter makes that clear. The letter talks about certain criteria which we believe a plan should meet, if it is going to regulate an incidental take.

The directed fisheries are targeted at highly migratory tuna over which we do not have jurisdiction under the FCMA. The first draft of the billfish plan which was presented to us for comment contained sweeping closures, 5 or 6 month closures in the Gulf of Mexico, that were not, in our opinion, adequately justified. We are not opposed to a plan for billfish and are prepared to work with the Department to develop such a plan.

Mr. BREAU. Would the National Marine Fisheries Service feel that the plan could be one that would be effective, of preventing the incidental take of billfish, which would be meaningful?

Can such a plan be devised that would not conflict with the guidelines that Mr. Busby just mentioned?

Mr. LEITZELL. I am not familiar with the specific comments that you are referring to, but we have looked at this particular problem.

We have worked with the Councils and with the State Department, and I think that an effective plan to control billfish incidental take, and to eliminate that to the extent possible, could be done under the FCMA and under the guidelines that we have discussed with the Department of State.

Mr. BREAU. Of course, the Secretary of Commerce, I guess, makes the final decision on whether that plan is within the proper guidelines, and the State Department, I guess, serves as a recommendation?

Mr. LEITZELL. That is correct.

Mr. BREAU. What about evidence that was presented in subcommittee hearings, that our action, saying we are all of a sudden going to regulate bluefin tuna within our zone, is going to be an effective measure? Some say that it will not be, because of the relatively small number of Atlantic bluefin that actually transit our 200-mile zone, that the incidental catch of billfish that is accomplished by Japanese fishermen is done outside the zone.

So we are not going to be effective in regulating that incidental take of billfish because we do not have jurisdiction outside the 200-mile zone.

Would you comment on that?

Mr. LEITZELL. That is a problem. There is an inter-Council committee that is working on the billfish plan, that has looked at the problems of incidental catch of billfish that takes place outside of our 200-mile zone. They have, in fact, requested that the executive branch undertake to obtain international management as well, of billfish, in addition to what would be done under a fisheries management plan within our 200-mile zone.

They felt that was the only effective way to conserve and manage billfish resources in the Atlantic. We are in the process of looking at the possibility of trying to obtain such measures through ICCAT.

Mr. BREAU. Now, certain members of ICCAT, in fact, as a country, claimed jurisdiction of tuna over their country's 200-mile zone. But as I understand it, within our 200-mile zone the regulation adopted by ICCAT itself are effective, and the other members follow those regulations within our zone, is that correct?

Mr. BUSBY. That is correct, and as well, they allow those regulations to apply in their own zones, even though they do exert jurisdiction over it.

Mr. BREAUX. With regard to the so-called Studds' amendment, were it to be adopted, would the ICCAT be able to operate within our zone, or would they be superseded?

Mr. BUSBY. They would be superseded.

Mr. BREAUX. Although we would belong to an international convention, and agree to the terms and dictates of that convention with other nations, we would not be able to enforce those regulations within our own 200-mile zone?

Mr. BUSBY. Yes.

Mr. BREAUX. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Forsythe?

Mr. FORSYTHE. Thank you, Mr. Chairman. Just a couple of questions.

Buzz, it would be technically possible for ICCAT to establish a moratorium, as has been suggested here?

Mr. BUSBY. Yes, sir, it would.

Mr. FORSYTHE. Terry, you said that other nations have included tuna within their conservation zone laws but are not enforcing them against the U.S. tuna fleet.

Can you tell us what nations they are quickly?

Mr. LEITZELL. I can give you a complete list, Mr. Forsythe.

I think the ones of major interest in the Atlantic fisheries are the West Africans who do allow our long-distance tuna vessels to continue fishing for yellowfin in that area.

But I can give you a more complete list.

Mr. FORSYTHE. If you could supply that for the record.

[The following was received for the record:]

U.S. tuna vessels fish in the Gulf of Guinea off the coast of west Africa. The countries which have coastlines on the Gulf include Angola, the Congo, Gabon, Equatorial Guinea, Cameroon, Nigeria, Benin, Togo, Ghana, Ivory Coast, and Liberia. These countries have not been enforcing their 200-mile zone jurisdiction against U.S. tuna vessels.

Mr. FORSYTHE. Just one more question.

If the Studds amendment were to pass, Japan would still have access in the U.S. zone for the purpose of harvesting tuna other than the bluefin.

Could the Japanese engage in that harvest without simultaneously taking bluefin and because of this, would it be more appropriate from management's perspective to bring all Atlantic tuna within FCMA?

Mr. LEITZELL. I am not entirely sure of the answer to that, Mr. Forsythe.

My understanding is that the bluefin fishery does have an incidental catch of others and, consequently, would work the other way around. In that sense, all of the tunas do require management of some sort, and I think in the case of all the highly migratory tunas, this type of international management provided through ICCAT is the most appropriate.

Mr. FORSYTHE. I am not quite sure that you hit where I was trying to drive because the question that I was trying to raise was a hypothetical one, in that if the amendment is limited to bluefin where would we be?

I think your statement was there is a separate fishing method so there is not that much crossover. They could fish for other tuna without getting much bluefin.

Mr. LEITZELL. Mr. Blondin may be able to provide you a more detailed and specific answer on that. I am not specifically familiar with the details of the fishery.

Mr. FORSYTHE. We will ask him.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Studds.

Mr. STUDDS. Thank you, Mr. Chairman.

Pleasure to see you gentlemen once again alive with the forces of the distant past.

I hope the Department of State will soon recognize the inevitable future trend in some direction before it is thrust upon them by events and by time. I do not think there is anybody around who is so naive as to think that we will not soon be exerting authority at least over bluefin, and if we catch up with the rest of the world where it is going, in spite of the testimony of the Department of State, we will find other migratory species under our management as well.

I assume, Mr. Busby, that you have not yet talked to the Secretary of State Designate on this subject?

Mr. BUSBY. That is correct, Mr. Studds.

Mr. STUDDS. It is entirely possible that the new Secretary of State will bring a fresh breath of air into this matter.

Let me ask you a couple of questions.

You say many nations perceive contradictions in our Nation's policy. Can you think of anything more contradictory than the fact that we exclude highly migratory species?

Mr. BUSBY. I think the fact that we have excluded highly migratory species of tuna and included billfish is a contradiction that I am referring to.

Mr. STUDDS. You think we should exclude billfish?

Mr. BUSBY. If we are seeking theological consistency.

Mr. STUDDS. Are we?

Mr. BUSBY. Or if we are seeking—my assumption has been that the law is drafted to protect the fishery interest of the United States.

Mr. STUDDS. That was not the position of the Department of State when the law was drafted, as you know. But you are correct.

Now, to be consistent, is the Department asking us to exclude billfish as well as the other highly migratory species?

Mr. BUSBY. No, sir.

Mr. STUDDS. Then how should we be consistent?

Mr. BUSBY. What I am saying, Mr. Studds, is that at the present time we have been charged with the responsibility of going off internationally and negotiating to protect the U.S. interest as defined in the law. I will tell you with certainty that the contradiction that is contained in the law with regard to billfish and tuna makes that a difficult task, and it is something that is thrown in our face.

Mr. STUDDS. We are trying to help.

Mr. BUSBY. To create another inconsistency by including a single species into the law, I think, is going to be more than we could carry.

Mr. STUDDS. I think it would be logical then to include all of tuna.

Mr. BUSBY. From a theological point of view.

Mr. STUDDS. What is so big about theology this week in the Department?

Mr. BUSBY. A new word.

What I would say, Mr. Studds, as I am sure you are aware and as the rest of the testimony points out, we are in the process of trying to do the job which we have been mandated to do, which is to negotiate strong fishing agreements. We are on the verge, I think, although I never make predictions about these things, at least we are going to have a meeting. That meeting will be held next week and I think it will be a decisive meeting one way or the other. And for us to make a move which clearly changes a policy as well as a law, which the United States has pursued for a number of years, is going to have, I think, a predictable and inevitable effect on those negotiations and the people that we are negotiating with.

The CHAIRMAN. Will the gentleman yield?

Mr. STUDDS. Yes, Mr. Chairman.

The CHAIRMAN. What is a decisive meeting?

Mr. STUDDS. One that occurs, Mr. Chairman.

The CHAIRMAN. What are you going to be decisive about?

Mr. BUSBY. We are going to have a meeting on the Eastern Tropical Pacific tuna fisheries next week in which we are going to try to sit down and resolve those negotiations which we have referred to.

The CHAIRMAN. In the Eastern Tropical Pacific?

Mr. BUSBY. Yes, sir.

The CHAIRMAN. We are talking about the bluefin.

Mr. BUSBY. The question was; Why should we not put all bluefin under the law? I am trying to respond.

The CHAIRMAN. I think you are a little decisive about the bluefin.

Mr. STUDDS. Mr. Busby, how would it, as you say in your testimony, put the United States in an untenable position in negotiations if we were to adopt a position consistent with the rest of the countries with which we are negotiating?

Mr. BUSBY. I believe that refers to bringing bluefin under the law.

Mr. STUDDS. It would be consistent if we took that position with respect to all tuna?

Mr. BUSBY. I am not saying that. It would certainly put us in the same juridical position as the majority of nations.

Mr. STUDDS. What is so darn difficult about having a position that is closer rather than further from the countries that we are negotiating with?

Mr. BUSBY. I think I can say with some assurance that the position that the United States has adhered to with regard to tuna for a good long period of time has been a decisive factor in whatever success we have been able to achieve in trying to protect our tuna interests.

Mr. STUDDS. How many countries are member nations of ICCAT?

Mr. BUSBY. I believe the present count is 17-19.

Mr. STUDDS. How many other than Korea and Japan do not assert jurisdiction over highly migratory species within their 200-mile zone?

Mr. BUSBY. Assert their jurisdiction?

Mr. STUDDS. Assert it.

Mr. BUSBY. I would have to check.

I think they are the only two that have not declared it. None of them enforce it against U.S. vessels.

Mr. STUDDS. Against U.S. vessels?

Mr. BUSBY. Or other vessels.

The reference to putting us in a small minority of nations has to do with that section of the amendment which states that we would not apply ICCAT regulations within our zone. That would put us in a minority—

Mr. STUDDS. You seem to be delighted to be in a minority of nations. There are only two nations other than ourselves who do not assert this jurisdiction, is that correct?

Mr. BUSBY. I believe so.

Mr. STUDDS. In that case, you enjoy being in the minority but in other cases you do not think it is a good idea.

Did I understand you to say that none of the 16 ICCAT nations asserts that authority vis-a-vis the ships in their economic zone?

Mr. BUSBY. It is difficult for me to say with regard to other countries, but with regard to the United States I think that is correct.

Mr. STUDDS. What about with regard to other countries? We probably do not have too many of our fishermen fishing in their zones for highly migratory species anyway.

Mr. BUSBY. I think I do not understand what you are getting at now.

Mr. STUDDS. I want to know if anybody exercises the authority which they assert?

Mr. BUSBY. I am saying with regard to ICCAT members, not against U.S. vessels that are fishing in their zones.

Mr. STUDDS. Why is that, do you suppose?

Mr. BUSBY. Because they are members of ICCAT.

Mr. STUDDS. Consistency is comfortable sometimes, I guess.

Let me ask Mr. Leitzell a couple of questions.

You point with pride to the fact that the United States has vigorously pursued management measures for bluefin tuna. Against American fishermen we have imposed management measures, is that what you mean?

Mr. LEITZELL. That is a reference to the management, applicable to all ICCAT nations.

Mr. STUDDS. Except it is not applied to all nations. Am I correct that we are the only nation or one of the few nations that has made a serious effort to comply with ICCAT regulations, and that we only restrict and regulate our own bluefin fishermen within our own zones?

Do we not allow our own fishermen, for example, 2,500 giant bluefin in the Gulf of Mexico, while the Japanese interpret ICCAT to allow them some 10,000 in our waters?

Mr. LEITZELL. We do regulate our own fishermen under the implementing legislation. Other countries do implement them.

The management measures, the main one of interest from 1975 was to limit catches to approximately what was the historic catch

at that point in time. That has been fairly closely adhered to by the members.

Mr. STUDDS. You think it is reasonable that the Japanese should be taking roughly four times as many bluefin as our own fishermen in our waters?

Mr. LEITZELL. As a simple statement, I would have to say no to that.

Mr. STUDDS. Well, that is the proposition you are now defending.

Mr. LEITZELL. No, I am defending management through ICCAT. I think I would prefer to have a system in which the other member countries are restricted, as are our fishermen, rather than a system in which there would be no assurance that foreign nations would be restricted.

Mr. STUDDS. We have no such assurance now, do we?

Mr. LEITZELL. Yes, they are adhering to the ICCAT regulations.

Mr. STUDDS. How do we know? We cannot observe them.

Mr. LEITZELL. We have observers on the longliners in the Gulf of Mexico.

Mr. STUDDS. How many? What percentage?

Mr. LEITZELL. It has varied. About 20 percent of the rate.

Mr. STUDDS. If they are in tuna vessels, we cannot stop them, can we?

Mr. LEITZELL. No, the observers are on board because of the incidental catch of billfish. They have reported back to us on whether the Japanese reporting is accurate, and their reports are that the Japanese are essentially accurate.

Mr. STUDDS. It seems to me a sad situation, when the people responsible for protecting our own fisheries justify a circumstance under which another nation interprets an international treaty to allow it and its fishermen 400 percent of the take of a very valuable species in our fisheries conservation zone, and we interpret that law much more stringently with respect to restrictions we choose to impose on our own fishermen.

It reminds me of the position of the State Department and the Marine Fisheries Service on the debate of the 200-mile bill. You came in here to regulate American fishermen, and American fishermen alone, as if they were the offenders within 200 miles of our zones.

Lo and behold, 7 or 8 years later, we have the same tenor. We are going to regulate them. We are proud of how strongly we regulate our fishermen. It is too bad that the Japanese and others do not interpret the treaty that way. Just because it is a valuable resource and within our fisheries conservation zone, we do not want to do it, because we do not want to upset international regulations.

It is an old record, and it was not very good when it first came out.

Terry, you make a big deal about the contention that we have perhaps one stock here. You say tagged northern bluefin tuna have been found to travel at least, 4,800 miles across the ocean. You know the numbers from which that is drawn. It is your own EIS in which you tagged them, in which 3,000 were picked up in the North Atlantic, and 24 on the other side of the ocean—out of a total of 15,000. That is hardly much of an argument to support the

belief that we are dealing with a single stock. Those are NMFS figures.

Mr. LEITZELL. I am not making the argument that we are dealing with a single stock, but there is evidence, both in that and other studies that have been done, which indicates that there is a fair amount of interchange between the stocks, enough so that, in my opinion, the—

Mr. STUDDS. You found two dozen over the years?

Mr. LEITZELL. My feeling is that there is enough interchange that we do have an interest in continuing conservation in the eastern Atlantic, and an international regime is the only effective way to achieve that.

Mr. STUDDS. Let me suggest that the strongest part of your argument, if you have one, is hardly this harping on the fact that there is this exchange across the ocean of the fish which you folks have tagged over 30 years—an average of less than one a year. I do not think statistics like those add much to your case.

Mr. Chairman, I apologize for taking much more than my share of time.

Thank you.

THE CHAIRMAN. MR. EVANS?

Mr. EVANS of Delaware. Thank you, Mr. Chairman.

Following up on the gentleman from Massachusetts as it relates to the tagging studies, it seems to me that the draft environmental impact statement is fairly clear in that a very minimal number of the bluefin tuna are highly migratory in nature, and that is your own National Marine Fisheries Service draft environmental impact statement.

Mr. LEITZELL. The tagging studies did find a relatively small number in terms of the interchange. Other evidence indicates that interchange could be significant, and if it is, I think we do feel—I certainly feel that there is a need for a conservation regime on both sides of the Atlantic.

Mr. EVANS of Delaware. I certainly have no quarrel in developing an international regime. I just do not feel that protecting the bluefin tuna now, within our 200-mile fishery conservation zone is inconsistent with that at all.

I just wonder about some of the billfish by-catch of foreign vessels engaged in that longline fishing. What actual enforcement ability do we have?

Does the Coast Guard have the authority to board?

Mr. LEITZELL. Yes, for any of the vessels which are engaged in the billfish fishery, they are required to allow Coast Guard boardings. We do have National Marine Fisheries Service observers on board a number of the vessels who not only are given access to the vessel logs, but who also watch any of the activities that take place on board the vessels. We have had some enforcement problems on billfish in the past.

We worked with the Japanese, to try to correct those. I think their current record is considerably better than it was early on in the fisheries.

Mr. EVANS of Delaware. Can you do anything besides just boarding the vessel, from the Coast Guard's standpoint? What type of

enforcement authority do they have? Can they actually make arrests?

Mr. LEITZELL. Yes, sir, certainly. If there is a violation of the billfish regulations, the foreign vessel is subject to either civil penalties, or in certain circumstances to arrest and seizure.

Mr. EVANS of Delaware. Gentlemen, I have no quarrel in trying to develop some type of international regime. When we are talking about wide-ranging fish, or wildlife resources, they are appropriately managed under some type of international regime.

I just cannot, for the life of me, see why what we are trying to do here precludes our efforts in developing an international treaty.

For example, we have been trying to develop a Law of the Sea Treaty for a number of years now. Ambassador Elliot Richardson has been working very hard at that.

One of the key areas relates to deep seabed mining, which the gentleman from Louisiana, Mr. Breaux, is quite interested in. We took the position at the outset that perhaps the United States should not do anything on a unilateral basis, because it might harm the efforts toward achieving an international regime, and sharing in that common heritage of mankind in deep seabed mining. By now I think most everyone, including Ambassador Richardson, have now concluded that the United States should go ahead and do something, at least put ourselves in the position to move ahead with deep seabed mining, while we are awaiting to achieve a more equitable and fair international agreement.

I think the same analogy applies here.

Mr. LEITZELL. Congressman, I do not think I would like to analogize ICCAT to the Law of the Sea negotiations, for a number of reasons. But I think it does depend on the individual circumstances in the negotiations.

In this case there are clearly tradeoffs. The ICCAT conservation regime has had some successes. It has not been perfect, and it has not been as successful as we would like, but on the other hand, we have to balance against that what would happen if the United States did assert unilateral jurisdiction and indicate that it was not willing to have ICCAT regulations apply in its 200-mile zone.

Mr. EVANS of Delaware. As the gentleman from Massachusetts pointed out very clearly, there is a difference between asserting and declaring.

Mr. LEITZELL. The legislation that has been proposed, as I understand it, would preclude the application of ICCAT regulations in the United States 200-mile zone.

Mr. EVANS of Delaware. I think, Mr. Leitzell, we can still comply with ICCAT on a voluntary basis. I do not think that that precludes voluntary compliance.

Mr. BUSBY. I think, Mr. Evans, the amendment, as we have it reads, "regulations promulgated under this act, concerning bluefin tuna, shall not apply within the United States."

That refers to ICCAT regulations.

Mr. EVANS of Delaware. Well, I think it is a question of what the Councils do. They can either adopt those recommendations, or not adopt those recommendations.

I see my friend John Bryson here from the Mid-Atlantic Council. They can either be adopted or not adopted, but it puts us in a position of being able to do it.

Mr. BUSBY. I think, Mr. Evans, we would have some difficulty with the idea that we would go off and enter into an international agreement with the understanding that we would not live up to the agreement that was made.

The CHAIRMAN. Would the gentleman yield?

Mr. EVANS of Delaware. Yes, Mr. Chairman.

The CHAIRMAN. Mr. Busby, what you are saying is that we cannot have it both ways, is that it? We cannot control a migratory fish within the 200-mile limits, and still have an imposition of an international convention on Atlantic tuna, and have that cooperative agreement which is not consistent with what we have done within our 200-mile limit?

Mr. EVANS of Delaware. If the Chairman would yield back.

There seems to be some question as to whether or not the bluefin tuna are highly migratory in nature, and the National Marine Fisheries Service draft environmental impact statement indicated to the contrary. That is No. 1.

No. 2, the reason that I brought up the analogy to the Law of the Sea Conference is that we are moving ahead at your behest, Mr. Chairman, and at the request of the gentleman from Louisiana, Mr. Breaux. I think most of us on the committee are going along with that, but that does not mean that we are not still trying to achieve an international regime, and I think in this instance, it would not preclude us attempting to achieve an international agreement on bluefin tuna if it can be received on an equitable basis.

In the meantime, I think what the gentleman from Massachusetts is attempting to do in his amendment is to protect American fishermen, American commercial fishermen, as well as sports fishing interests, and I support him in that regard.

The CHAIRMAN. Would Mr. Busby respond to my question?

Mr. BUSBY. I think you are exactly right, Mr. Chairman.

What I am really saying is that if we are to belong to an international organization which has as its purpose the development of regulations which we go into an international forum to develop and work for, but then we say we are not going to apply those regulations within our 200-mile zone, that is right, you cannot have it both ways, at least not in our view. That is why we are so opposed to that section of the amendment.

Mr. EVANS of Delaware. Maybe the amendment could be rewritten. That is possible, Mr. Chairman, at some point.

Thank you, gentlemen.

The CHAIRMAN. Mr. Anderson?

Mr. ANDERSON. No questions.

The CHAIRMAN. Thank you very much, gentlemen.

Our next panel, Mr. Carmen J. Blondin, U.S. Commissioner to International Commission for the Conservation of Atlantic Tunas—ICCAT—Frank E. Carlton, U.S. Commissioner to ICCAT; and Harold Cary, U.S. Commissioner to ICCAT.

Mr. Blondin, we will ask you to lead off and then we will go to Mr. Carlton and then Mr. Cary.

We have analyzed your statements and realize there is a difference of opinion which we certainly appreciate. All statements will be printed in the record in their entirety at this point, and I would ask you to summarize them for the benefit of the committee so that we could get to questions.

Mr. Blondin?

STATEMENTS OF PANEL 3, CONSISTING OF CARMEN J. BLONDIN, U.S. COMMISSIONER TO INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNAS (ICCAT); FRANK E. CARLTON, U.S. COMMISSIONER TO ICCAT; AND HAROLD CARY, U.S. COMMISSIONER TO ICCAT

Mr. BLONDIN. Thank you, Mr. Chairman. I do not have a statement. My other colleagues do.

Since I represent the Government end of it, I think that what has been said by Mr. Busby and Mr. Leitzell would be similar to what I would say had I prepared a statement.

I would, however, like to comment very briefly on the effectiveness of ICCAT because this seems to have come up several times. ICCAT, in international terms, with its now 19 participating countries, is really a relatively new international organization. It is true that the organization was developed in 1969, but as with most international organizations like this, with a large field of operation, the first phases are the research and scientific phase and, indeed, that is where we have placed much of our emphasis, and we have only really begun in recent years to begin to take regulatory action over certain fish.

Bluefin tuna is one of those fish that are under regulation by ICCAT.

We also have regulations that apply to yellowfin tuna and bigeye tuna. But I think the most important argument I can make in support of ICCAT is that it serves as a forum for scientists to discuss their research work so that we have a true picture of the status of the stocks of highly migratory species in the Atlantic.

The regulatory aspects are always difficult in any international organization. The lowest common denominator seems to rule at times and, indeed, as has been said earlier, the United States has been in the forefront, along with several other countries, on the conservation of Atlantic bluefin tuna. We have not gotten precisely what we wanted. In fact, there has been a great deal of criticism of the current arrangement of limiting mortality to recent levels.

We tried to define the regulation more sharply, using specific years, specific tonnages, but we found that we would not be successful, particularly with the developing countries in Africa.

Having made those points, Mr. Chairman, I do want to say that having participated in ICCAT for the past several years, since at least 1975, that I think this is the only game in town. And while it is a difficult one and there are some countries who are not members, who are also fishing, we hope in time that we will have complete coverage.

Thank you, sir.

The CHAIRMAN. Mr. Carlton?

Mr. CARLTON. Thank you, Mr. Chairman.

In the process of preparing this over-lengthy document all of the points that have come up for conjecture before this committee today and before, have been discussed at great length and will be available, addressed from the different points of view from the documents that the committee has available.

I really think that the most important thing I can say to the committee is that this suggestion from Mr. Evans of perhaps revising the language in the amendment is very appropriate.

I think Mr. Studds' amendment, the idea of his amendment, the necessity of his amendment is something that the committee should absolutely not lose sight of.

We must have something done and exactly what that something is is what we are discussing this afternoon.

All of my conclusions would point to including all highly migratory species under that amendment. It makes sense, as has been alluded to from several different witnesses already from a lot of different directions. At the same time it has the benefit of not harming the distant water tuna industry in their relationships with foreign countries and negotiating position in the Pacific, and it makes sense, better sense for bluefin tuna and yellowfin tuna and billfish in the Gulf of Mexico and in the Atlantic.

I think there is a way to continue with our participation in these international forums and at the same time protect the United States interests better under the FCMA. If the language in Mr. Studds' amendment or another amendment simply said that the treaty positions arrived at for highly migratory species served as a basis from which the councils would work, to whatever more stringent positions they felt might be necessary or what particular applications might be necessary within our conservation zone, that would still make the United States a party to those treaty agreements.

I think the committee should be aware that any international conservation agreement that is arrived at is a very basic and minimal thing. It is not a maximum conservation agreement by the nature of the environment that creates it. It cannot be. There is always somebody there that violently opposes it and someone who wants so much more than they can get and the compromise that is worked out in an international forum is a minimal kind of thing that I do not think the United States should allow the regional councils or any other fisheries agency to back off from.

I think that the minimal conservation position arrived at through appropriate international processes that the United States should not ignore. I think if the language of the amendment simply said whatever international treaties we had provided the basis for further council action, whatever the specific language was, as long as that idea was there, that would be fine.

Second, I think that the United States has to have the jurisdiction to inspect foreign-flag vessels fishing within our conservation zone, regardless of what fishery you are talking about. I do not see anything inconsistent with saying on the one hand that we are party to ICCAT and on the other hand we are going to inspect foreign-flag vessels fishing in our zone under ICCAT regimes. I think that would accomplish exactly what Mr. Evans and you were alluding to a few minutes ago and has all the advantages that were

brought out in the conversation between Mr. Studds and Mr. Leitzell and Mr. Busby. I think that single concept, the concept of continuing to participate in international forum, at the same time should give the United States the authority to be sure that Japan or any other foreign participants are adhering by those agreements is the single, most important thing that I have to say. Now I could go on at some length into various points that I made in this paper and refer to some other questions that have already been brought up. I think the most important things that have been said, that I might touch on just briefly is this question of whether ICCAT is working or not. Certainly it is working. Working has to be understood to be a scientific extent, an exchange of information extent, but Japanese have played with the concepts and with the words, and the documents available to you prove conclusively that they are both catching more fish and violating the concept of fishing mortality under the agreement that they made in 1974.

The idea that we can take those fish away from the Japanese and give them to American fishermen would be just as great a violation of the idea of conservation. I think the committee should bend over backwards to avoid that.

The other idea that was brought up in questioning is this concept of moratorium.

The CHAIRMAN. Dr. Carlton, we are going to have to interrupt you at this point. There is a very important vote on the floor right now on the budget. We will be back in just a few minutes and we will take a very short recess and then we will continue.

[Short recess.]

The CHAIRMAN. The committee will come to order.

Dr. Carlton, if you would proceed. We regret those interruptions, but it is the only way we can operate here.

Dr. CARLTON. I understand. Sometimes I have the same problem.

The CHAIRMAN. Incidentally, we appreciate your giving up your practice today to come here on a voluntary basis to assist us in working out a solution to this problem.

Dr. CARLTON. Thank you, sir.

I was about to say a few things about this idea of a moratorium. There is a flavor of I think extreme positions about this whole meeting that are unfortunate. These conversations have been going on for a number of years and all parties concerned I think have been too intractable. A moratorium is again a radical measure but does not serve a lot of interests and probably does more harm than good. In point of fact the bluefin tuna is in trouble as a stock and in appendix H in that long paper that I gave the committee there is a very graphic picture of the decline of the bluefin tuna stock, and just behind that there is another more recent graph of what is happening to small, medium and large fish.

There are a sufficient number of fish to maintain a controlled fishery, but it has to be a controlled fishery. The agreement that was reached in ICCAT in 1974 sought to address that exact problem. The problem that exists today is not that the species is so declined, so depleted that it is in danger of extinction, the problem is today that if you do not keep that agreement or something that is a reasonable conservation measure with the depleted stock, then ultimately you will get virtual extinction or economic extinction.

There are several other points that are important that I think have been touched upon, and I think will probably be brought up in further questions.

I would just like to conclude these summary remarks at that point and pass the discussion on.

The CHAIRMAN. Mr. Cary.

Mr. CARY. I wrote in contrast a very short statement. I will read only part of it.

My first connection with tuna conservation occurred in the Fall of 1948. At that time it was before the Senate Foreign Relations Committee, the idea of a convention with Costa Rica to establish the Inter-American Tropical Tuna Commission. I was asked to appear as a sole witness, and, as it turned out, we did then launch the work of that commission in 1949. I think this is the first instance that I have been able to discover where an industry, a fishing industry, sought scientific findings—the initiation of research, before a problem appeared. By 1966, it was said that there should be a quota on yellowfin tuna. That quota was 79,300 tons. As scientists learned more about the ocean, the quotas have since expanded to top limits of 215,000 tons. What we learned from this was the sea does give up its secrets very easily, if we want to get poetic about it.

We oppose the amendment as proposed. It removes the highly migratory species designation from Atlantic bluefin tuna. It places it under FCMA to be managed unilaterally in the same manner as coastal species.

The premise is that bluefin stocks are severely depleted. There have now been some comments to suggest that that is not so. The literature does not say this, incidentally.

While catches declined in the early seventies, ICCAT reports show they have increased beginning in 1974 and have run at a reasonably stable level since.

In our view again, the amendment is not in the national interest because of the change in principle involved as well as the costs and losses it would create in our fishery economy. These are briefly noted.

The principle involved: The principle is that tunas are highly migratory species that can be efficiently conserved only through international cooperation and agreement.

This is the principle on which the tuna fisheries of the United States have been built, and the recognized practical basis which the principal tuna-producing nations of the world have followed.

The proposed amendment essentially destroys the principle in saying Atlantic bluefin tuna is not migratory, as we view it, and we own that species when it is in our 200-mile zone. It also asserts we can conserve them efficiently by unilateral management. Because the principle has so broad an application, far beyond Atlantic bluefin, and applies to all tuna fisheries, it is not a local issue involving a few tons of fish.

The second point I make, it conveys a message. The assertions of ownership and effective conservation made which signal to any nation, within whose 200-mile zone any species of tuna appear, that it would be affirmed in any decision to claim ownership and in its ability to conserve tuna. The United States has taken the lead in

fisheries conservation. This is particularly true as it concerns the tuna species and is found in its sponsorship and participation in the Inter-American Tropical Tuna Commission which began its work in 1949. ICCAT which we are discussing here, H.R. 6310, providing funding for that commission, began its work in 1971. We participated in many conferences of an international nature throughout the world, Indian Ocean, South Pacific and other places. In fact, many years ago the United States Government launched Pacific oceanic fishery investigations. This is in the late forties, early fifties. In all these forums we have stated that to do things efficiently we have to take into account the migratory nature of the species and that cooperation is needed as well as agreement. The change called for in this amendment would threaten this.

A third point is there are costs. The costs are several. The loss of the majority of our largest food fish fishery which in total, based on 1978 figures, was valued at \$239 million. Tuna represented 29 percent of all food fish landings value, and I present a table to show how that is arrived at.

The canned tuna production was valued at over \$1,270,000,000 and represented 70 percent of all canned fish produced in the United States.

As a part of all of this, the tuna people have expanded in different areas. Puerto Rico is a very important tuna-producing center, virtually on par with California at the present time. Their 1978 shipments were valued at \$587 million and represented by the way the Commonwealth's most important category of shipments. I would call them exports, but that is not a foreign country and hence they are shipments.

It would have adverse effect on American Samoa where tuna processing is by far the principal business activity of the island.

A second area of cost would be, on the assumption that the level of tuna processing in the United States could be maintained, that the U.S. balance of trade would be adversely affected by importing tuna sufficient to fill the gap created.

Imports of edible fishery products of all categories totalled \$2.3 billion in 1978, of which tuna products represented just short of \$400 million. Anything which increases this obviously does affect balance of trade adversely.

There could be loss of employment, skills, investment, production. These would be very high based on the measurements used to determine our national fisheries position.

The third cost is unquantifiable as has been discussed by previous witnesses. That is those things that I mention are set in motion by loss of negotiating position. It will be difficult to us should we proclaim an exclusionary process to talk to people on how we can arrive at agreement with them. I have included several tables of comparison, and this is not an invidious comparison, but these are what the facts show.

The landings of bluefin in the Atlantic and Pacific. By the way, about 75 percent of bluefin is caught in the Pacific by American fishermen, so while the differences are great, it does not mean the Atlantic bluefin fisheries are not important. They are. In our view, they can be expanded. In our view, the discussions with the Japa-

nese which have been reported as productive should continue. Development of support for information on a meaningful scale on the stocks should continue through ICCAT as mentioned in the Santander report—the first gathering in scientists in the Atlantic to discuss bluefin. What usually happens at ICCAT meetings, is that 1 week before the proceedings the scientists get together. It has been the view I think shared by most of us that these should be greater in scope and we should have more meetings. If bluefin is a problem, and it has been in years, then we should set about finding what the evidence shows. You do not do that in 1 week when scientists with different nations get together to see what they have all discovered in the year that has gone by.

There are some positive steps that can be taken. We should support and we all are unanimous in appearing here in support of a financial contribution by the United States to ICCAT.

The second point I make is that as part thereof, and because of the concern expressed about bluefin, specific financial support should be given to some of the recommendations of the bluefin workshop in Santander. Establishing a permanent ICCAT working group on bluefin is the principal element in this. We cannot do it in 1 week.

Another point I make, and this is done between governments, discussions between the United States and Japan should be encouraged in order to continue and extend the cooperation that has existed with respect to conservation. Japan has a very great knowledge of the Atlantic fisheries. If any of you could attend the Advisory Committee meetings or special meetings which are called when billfish are discussed, the amplitude of the Japanese information constitute nearly the entirety of the record, and this is one of the advantages of ICCAT. You have accessed this information which the Japanese have developed.

I believe further that the National Marine Fisheries Service should be asked to provide information whereby our fishermen can develop a meaningful fishery in those areas where bluefin are known to be present but no effort exists. If other people can find them, certainly American fishermen can find them.

I would then close by saying that a reading of the proceedings, No. 1, and No. 2, from the Madrid meeting of ICCAT would cover the answer to a great number of questions asked about bluefin.

Second, the preliminary Santander report is a very interesting report of the work that is planned and the state of the knowledge. The final report is in preparation at the present time. And, third, we have talked about enforcement of these kinds of things. ICCAT did get through a port inspection plan at this time which covers tuna deliveries, transshipment and so forth, where reports are required as to what has been caught by vessels fishing in the Atlantic. So I end my very brief remarks by saying what we need is cooperation. It is easy to say that. It is difficult to get it.

I close with this remark. Every nation fishing tuna on meaningful scale require that cooperation. This is not unique to the United States.

Thank you.

The CHAIRMAN. Dr. Carlton, you support U.S. management of bluefin tuna in U.S. waters. If we withdraw from ICCAT, how

would we control catches by other nations beyond our 200-mile limit?

Dr. CARLTON. I think withdrawal from ICCAT would preclude us from a great deal of the control that we have had up to this time. I think ICCAT has had a beneficial effect on some control. My point in this testimony has been that we need more than we have got. There is a great deal of reality to commissions like the International Whaling Commission and certainly to the Inter-American Tropical Tuna Commission and some to ICCAT, but the history of resource management of international resource management agencies and commissions has not been good. The successful ones like the Fur Seal Commission and to some extent the Pacific Halibut Commission have been exceptions rather than the rule. The general tenor of international management commissions and agencies has been more of a scientific group and more of a social group, as IWC has been. The full impact on management has been more as the case history with whales demonstrates. The stock declines to the point that it is no longer economically significant. Then the Commission has lost any significance that it had. I think the United States needs badly to continue all its participation in the international forums. I do think that it needs to be enhanced with some type of enforcement, and I think the U.S. inspection of vessels fishing in its conservation zone is no more than countries like Mexico and Costa Rica now do to our vessels fishing in their zone.

I do not think that really offends anybody's sensibilities in terms of something new or something that violates this idea of coastal state preference or something that would in turn make Mexico or Costa Rica kick our boats out tomorrow.

The CHAIRMAN. Mr. Cary.

Mr. CARY. The question again please.

The CHAIRMAN. Well the question is: Dr. Carlton supports U.S. management of bluefin tuna in U.S. waters, and if we withdraw from ICCAT how are we going to control the catches by other nations outside of our 200-mile limit?

Mr. CARY. ICCAT, can make important moves, irrespective of the fact that international gatherings have been here called social groups, I have never noted that as part of ICCAT. There is a lot of work to be done.

The CHAIRMAN. Sometimes I think some Americans think the United Nations is a social group.

Mr. CARY. I have never attended recently.

We need information to make an intelligent decision. There can be no quarrel with that. The question is whether this bill promotes that activity or does not. I would go on the premise that other nations are interested in the preservation of those stocks. They have to provide the information, but the tables of information on catches give you pretty good clue to this. Catches have increased. My point is obviously no one is suggesting, as I understand it, we withdraw from ICCAT.

ICCAT, if it strengthens on the premise that bluefin is the one species they want to worry about or should worry about, should strengthen that information base and put in a lot of time on it, and it is going to take money. We have to do this. The Santander meeting was only a beginning.

This is not on my part an idea of let's put it off to some future date and appoint a committee. The ocean is a very big place, even the Atlantic, although smaller than the Pacific, but nature as I said does not give up the secrets easily. We have a lot to learn. Much has been said about the Gulf of Mexico fishery. It is my understanding from scientists nobody even knew it was there until relatively recent years, and I am talking about a decade. In addition to this, if we accept the concept that commercial fisheries should be conducted in the world, and we are going to eat fish, we have to think about efficient use, and if we say we know all about it at any given year, we have to be sure that is true. It is my understanding that that Gulf of Mexico fishery was developed by the Japanese. We have to leave room for fisheries development. It cannot be all controlled. Degree of control depends upon the degree and accuracy of information. I am not a scientist, but I have worked with them nearly a lifetime, and we disagree with them very strongly from time to time. Scientists tend to be exceedingly conservative. Fishermen are the opposite, and that balance is necessary in the things we do.

Therefore the control, according to the question, will come through international cooperation. It has been asserted that some nations did not cooperate. I do not know that the record, when you take into account development of new areas which have not been fished before, warrants that conclusion.

The CHAIRMAN. Mr. Blondin.

Mr. BLONDIN. Mr. Chairman, I think that without an effective international effort outside 200 miles there would be no way to control the management of bluefin tuna. I believe quite frankly, having participated in ICCAT and been among the commissioners who have pushed very hard for bluefin tuna management internationally, that if we were to back out of this in an attempt at unilateral control, without international cooperation, the other countries could well let what management exists go down the drain. At the moment, I think it is fair to say that the United States and Canada are among the nations most concerned about bluefin tuna. Several other nations I think are now beginning to be aware that we do have a problem, and hopefully we will get more cooperation from them. But I do believe without ICCAT efforts we would not be able to control the take outside 200 miles.

The CHAIRMAN. We have had the expression from this panel that international convention, not just ICCAT, but others are minimal in their control and effectiveness.

What if we required an observer on every foreign boat that fished in U.S. waters?

Mr. Blondin.

Mr. BLONDIN. I would assume that this is predicated on the fact that we would have 200-mile jurisdiction or at least be able to assert that right under the terms of our present billfish regulations. I think this might give us a better handle on what is precisely being caught within the zone. I am not sure it is going to have any effect on the management regime as such. While I think a few years ago there might have been some concern that Japan was catching more fish than it might have been reporting, at least based upon our own estimates, I think in the past 2 years the

observer coverage that we have on board Japanese vessels within our own zone would indicate what they are reporting to us is fairly accurate. There is not that much disparity between the reports and the actual catches as we perceive them to be.

The CHAIRMAN. Mr. Anderson.

Mr. ANDERSON. Thank you, Mr. Chairman.

Just a question to Mr. Cary.

Mr. Cary, first I like the way you laid out your remarks. They are very understandable. Even I can understand them.

You say here principally that the tunas are a highly migratory species and the proposed amendment, the Studds amendment, would define Atlantic bluefin as not migratory.

Now earlier you heard Congressman Studds mention the fact that some bluefin tuna have been seen some 4,800 miles away. He mentioned only a dozen, in contrast to the thousands that have been found within the 200 miles. If you catch just a few that were tagged at 4,800 miles, against many within the 200 miles—

Mr. CARY. I am going to have to leave that to the scientists. I do not like to get out of my element.

Mr. ANDERSON. This is one of the questions that I have to be able to answer. If you have only been able to find a dozen or so that have gone 4,000 miles, and all the rest of them perhaps stay within 200 miles, am I correct in concluding that tuna is still migratory?

Mr. CARY. A lot of these are caught immediately after setting. We have been in the tagging business for a long time in the Pacific and the point is that there is evidence of their migrations, both in the Atlantic and Pacific, and this is picked up by tags. There are other ways which are being developed which I have noted in other appearances, wherein scientists are talking about the mixing of stocks, you will note I had commended to people here the reading of the proceedings one and two. As I mentioned to you, Mr. Anderson, I do not like to get into discussing the science, but the point is there is evidence of extreme migrations. Bluefin are known for this and have been for many years. They have recovered enough tags in the view of scientists to demonstrate without doubt this is what occurs.

Mr. ANDERSON. Another witness testified that within the 200 mile zone in the Atlantic, American fishermen had been catching the proscribed amount and the Japanese six or seven times that amount.

Did you agree with those findings?

Mr. CARY. I do not know the exact distribution the Japanese catch. There is a large catch in the Gulf of Mexico, which ultimately migrate north, and in its migration it is inside and outside 200-mile zones. As someone brought out, one of the difficulties in such management is that if we have a 200-mile zone, there is nothing to stop anyone from sitting outside of 200 miles and pick up these fish as they leave. We have a rather small quota in our fisheries off the New England area. It is for the entire Atlantic bluefin area, the only place that is caught in any meaningful scale commercially is off New England and a few of the States to the south. It is a very small quota.

Once our quota is filled, those fish continue to move and they are therefore caught by other people in time.

Dr. CARLTON. Mr. Anderson, may I add something to the first question you asked about interchange and about the amount of fish that are caught in and outside the zone?

The preliminary week of scientific meetings that precedes the commissioners' meeting in ICCAT publishes a document every year, the Standing Committee on Research and Statistics Report. The report from last year dealing with this two-stock question, whether there is one or two, concluded with this paragraph that is very brief. I would like to read it because it expresses the exact idea of whether there is one or two and how much difference it makes.

"Interchange"—that is interchange between East and West Atlantic—"Interchange may be either sporadic or regular. Current data indicate that interchange of juveniles is not greater than 15 percent when interchange occurs. The existence of two temporal and spatially separate spawning areas is well-known. The pattern of relative abundances of successive year classes indicates differences between East and West segments in that the 1973 year-class was very abundant in the West while the 1974 year-class was abundant in eastern waters. These latter two phenomena confirm independence of reproductive success perhaps indicating biological discreteness. The data is not yet sufficient to provide for consensus as to whether there is one or two stocks in the Atlantic."

"In conclusion, it may be stated that the present evidence—which is still somewhat weak—is toward the hypothesis of separate eastern and western stocks, with a small and variable interchange of fish between them."

Now the point of this whole two-stock idea was not a scientific question. Canada brought up the basis of two-stock separation because the fish behaved sufficiently in that manner—a two-stock manner—to allow for a management plan on that basis. It did not matter whether enzyme systems were the same or whether fish shared nasal parasites or anything else. What mattered was that most of the fish that spawn in the West stay in the West and likewise to the East, and if there was some interchange, the interchange was so small that a conservation program put into effect on either side would be felt on that same side.

The CHAIRMAN. We have a vote on the floor again. It is on the Federal Trade Commission. We are going to recess for that.

[Short recess.]

The CHAIRMAN. The committee will come to order.

We were going to finish with an answer to Mr. Anderson.

Mr. ANDERSON. I am all finished.

The CHAIRMAN. Mr. Forsythe.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Mr. Blondin, I would like to ask you the question that I asked Mr. Leitzell.

If the amendment were to pass and the Japanese still have access to the U.S. zone for purposes of harvesting tuna other than bluefin, can the Japanese engage in that harvest without simultaneously taking bluefin tuna?

Because of this, would it be more appropriate from a management prospective to bring all tuna within FMCA?

Mr. BLONDIN. Mr. Forsythe, I am not sure I have all the scientific information to answer your question accurately. Let me say that if the jurisdiction were extended over bluefin tuna alone, and that would make the assumption that foreign vessels would have access to our zone, as they do now under our billfish regulations, similarly, there is the potential for some incidental catch of other species of tuna. I think, however, that a closer analysis might show that the incidents of the incidental catch might vary through the year by location.

Mr. FORSYTHE. There is a management technique to handle that.

Mr. BLONDIN. Yes, possibly. What I was driving at was that I would think that if bluefin tuna were under our jurisdiction, we could expect that if a vessel came into the Gulf of Mexico during the months of, let us say, January, February and March to fish yellowfin tuna, that incidental catches of bluefin tuna would probably be rather high in the Gulf of Mexico. If it occurred at some other time in midsummer, chances are the incident of bluefin tuna would be much lower.

Mr. FORSYTHE. Mr. Cary, would you want to respond to that same thing?

Mr. CARY. The question was what about including all species?

Mr. FORSYTHE. If you bring one in, can you leave the rest out and still have a problem with bluefin?

Mr. CARY. I pointed out in my statement because the principle—we are now hinging on bluefin—has so broad an application, it is no longer a local issue. Hence, it would extend therefore to all tuna ultimately. Therefore it would affect all tuna fisheries in the world.

Mr. FORSYTHE. I think I understand what you are saying. That goes to the domino effect of this kind of operation. But I was trying to narrow it down. Would the other tuna within our zone, which could be caught legally, involve a big catch of bluefin—in other words, you just cannot regulate the bluefin alone without having a problem.

As Mr. Blondin says at least at certain times of the year in all probability, it would be a problem. Would you agree with that?

Mr. CARY. Yes, I agree with the general principle. We will have a scientific witness, and I would like you to ask him that question.

Mr. FORSYTHE. I am sorry Dr. Carlton left because I did have one question for him. That is all I have.

The CHAIRMAN. Mr. Hughes.

Mr. HUGHES. No questions.

The CHAIRMAN. Thank you very much, gentlemen.

[The following was received for the record:]

STATEMENT OF FRANK E. CARLTON, M.D., PRESIDENT OF THE NATIONAL COALITION
FOR MARINE CONSERVATION

The enclosed paper enumerates replies to statements made by Harold Cary (1), Jack Bowland (in his own name) (2), and Jack Bowland over David Burney's name (3), as representatives of the United States Tuna Foundation in their opposition to the Studds Tuna Amendment to H.R. 6310 (to place Atlantic bluefin tuna under FCMA).

In summary, the positive points I have tried to make in this paper are: (1) that the time is long overdue for the United States to reassess the relative importance of its distant water fisheries in the light of changing national priorities, and make whatever changes necessary to simultaneously protect both of those interests to the greatest extent possible; (2) that international fisheries organizations such as the International Whaling Commission, the Inter-American Tropical Tuna Commission

and the International Commission for the Conservation of Atlantic Tunas are not operating in a fashion that best serves United States interests; (3) that no international fisheries management organization can be effective without an enforcement capacity; and (4) that there are current and pressing economic and national security reasons why these issues clamor for immediate attention by the Congress of the United States.

Opposition to inclusion of tuna under FCMA contends that "highly migratory species must be managed throughout their range."

The manifest meaning of this assertion is a half-truth which attempts to purposefully obscure the latent and more germane argument on coastal state preference (CSP). The concept of CSP here refers to the right of a coastal nation like Mexico to conserve (wisely use) fisheries within their area of extended jurisdiction.

The observation that highly migratory species should be managed throughout their range is undeniably true, but the inference that if you cannot manage on an international basis it is preferable to do nothing, or that unilateral management is biologically impossible, is simply not true.

At the outset of this discussion, it should be recognized that each member country in an international natural resource management regime is simply trying to find a way to limit everyone else's use of that resource except their own.

The truth of this assertion is attested to by the fact that for hundreds of years member countries of such organizations have, with few exceptions, refused to allow other member nations or a third party organization any right of enforcement. (see Appendix A) There is little if any reality to international natural resource management regimes that have no enforcement capacity, like the International Commission for the Conservation of Atlantic Tunas (ICCAT), or the International Whaling Commission (IWC), for example. ICCAT and IWC are worthwhile in their stimulation and exchange of scientific data, and the fact that they do encourage at least the appearance of conformity to conservation programs, which the scientific portions of these commissions make unavoidably obvious by offering for many years incontrovertible proof that stocks are depleted, or overfished, or both. All too frequently, however, a member country (like Japan and Russia in the IWC, for example) will say "I don't care what the commission agrees to, how depleted the stock is, how good the scientific proofs are, we are going to continue to fish". (see Appendix B)

So it is apparent that management per se, as in the IWC case and others, without enforcement, is meaningless, i.e., it cannot be management.

With regard to the argument on coastal state preference which is here couched in biological terms about highly migratory species, it is fair to say that San Diego representatives would rather that argument be discussed in biological terms which tend to obscure the real issues. The real issue would entail an objective reassessment of U.S. tuna interests versus other U.S. national needs and priorities. The primary point regarding coastal state preference is that the United States desperately needs congenial relationships with Mexico, other Central and South American nations and Canada. The vital necessity to the U.S. of having a firm and fast friendship with Mexico and Canada far transcends the economic significance of any fish (let alone just tuna), technological and industrial exchange and other resource commodities, for example uranium and oil. In simplistic terms, it might be said that the U.S. must have friendly relations with her southern and northern neighbors in order to maintain hemispheric sanity; and conversely the case could be made that continuing to deny the validity, supported by third world countries like Mexico and developed countries like Canada in addressing the coastal states preference argument, demonstrates an irrationality if not a frank mental imbalance.

Opposition to inclusion of tuna under the FCMA asserts that doing so would harm (unfairly, irreparably) the U.S. distant water tuna industry.

This is exactly the same argument that was made against FCMA in the first place, and is based on the idea that if the U.S. asserts jurisdiction over highly migratory species, other nations in turn will react with assertions which are harmful to the distant water tuna industry. The central point in rebuttal is that if there is a cause-and-effect relationship between U.S. initiatives over marine resources, and legislative or other reactions by other nations, that process began over thirty years ago, and has long since passed the point where statements by the U.S. over highly migratory species, other fish or seabed mineral rights, have any effect at all in initiating further responses from other nations, particularly third world nations like Mexico and Costa Rica. They reacted thirty years ago and have since amassed great tangible and intangible evidence that they were exactly correct in their decision.

It makes no sense at all to say that the U.S. proclaiming domestic jurisdiction over highly migratory species would cause Mexico and Costa Rica to do anything, for example demand a larger share of the tuna catch within their conservation zone,

that they are not doing now. Third world nations are already convinced that they have the same natural resource rights in their coastal waters that they do on land, and can simply point to the U.S. positions as expressed in the Truman Proclamations and Public Law 94-265, to graphically illustrate the "have your cake and eat it too" posture of the United States on this point.

Rather than harming the U.S. negotiating position in the ongoing IATTC negotiations, frank recognition of coastal state prerogatives would at long last put international fisheries deliberations on a realistic basis and lead to workable, lasting agreements, agreements which in the past have been characterized by costing the U.S. inordinately more upfront (for the creation and continuing support of international fisheries commissions), characterized by conservation programs that were enforced only upon U.S. fishermen, and in most instances adding further damage to the U.S. image abroad.

The "harm" that the tuna industry is actually complaining about (and understandably so) is that one of the richest, longest-enduring gold rushes in U.S. history is coming to a natural end. Comparing the evolution of the tuna industry to other natural resource exploitative industries, like gold, timber and copper, for example, reveals the simple truth of the old homily about those who get their "first'st with the most'st", and what inevitably occurs when others get their second, third and fourth, etc. In the history of all of these natural resource developments there are always those who will not admit there is no such thing as a free lunch, that someone has to pay the bill. When those who "got there first'st" have enjoyed the "get rich quick" phase, the prospect of only realizing a fair and reasonable profit is perceived as a tremendous comedown to be fought against with all means possible. In the particular instance of tuna, the nation's taxpayers have been asked to bear an inordinate amount of expense for a free lunch in the form of the Fisherman's Protective Act, which has cost U.S. taxpayers millions of dollars and caused incalculable damage to U.S. domestic marine resources.

But these changes have been obvious for thirty years, and it is becoming more and more apparent that the United States as a nation as well as the tuna industry itself are now doing each of their respective interests more harm than good, both in the material world of dollar costs and in the more abstract world of foreign relations. It is high time for an earnest (and necessarily painful) reassessment of the U.S. position on CSP in light of the changing priorities of other national interests. A good brief could be developed on the point that the Congress (rather than the State Department) is the only branch of government capable of a change of this order. Established nations, for example England in several instances, the U.S., India and Israel to name a few, tend to underestimate the power of nationalism, just the United States (particularly the U.S. Department of State) has completely misjudged the affect of the Declaration of Santiago (1952) and the spirit behind it.

Opposition to the inclusion of tuna under the FCMA asserts that ICCAT is working, and bases this assertion on the observation that recent data reflect an increase in Atlantic bluefin tuna populations as a direct result of the ICCAT bluefin tuna conservation program.

Again, this assertion represents a half-truth and a deliberate misinterpretation.

ICCAT is working, but "working" must be understood to mean the stimulation and exchange of scientific information. As a management agency, it is better than having no agency at all, because there is some pressure to achieve at least an appearance of conforming to conservation agreements. Although the Japanese insist they are abiding by the ICCAT conservation agreement, or what they now say is their perception of that agreement, they in fact are not. Two things should be understood in this regard. First, when the Atlantic bluefin tuna conservation agreement was passed in 1974, establishing a size limit of 6.4 kg and a catch limit of that caught in recent years, the status of the stock and the level of fishing effort were already passed the point whereby simply maintaining the status quo would ensure a continued healthy bluefin tuna population. The stock was severely depleted, and what stock remained was being overfished, a condition which clearly ensured that its continuation would lead to certain economic (virtual? biological?) extinction of the stock. Despite these facts, the best language ICCAT participants could produce said merely that the member nations would limit their catch to that of recent years; that is to say that they would not increase their catch. Obviously, this is neither management nor conservation. Continuing to overfish a depleted stock means that the stock must continue to decline but, nevertheless, that was the agreement, the best that could be done. A second point is that the Japanese insistence that they are living up to the Atlantic bluefin tuna conservation agreement depends on how you define "recent years". In 1974, when the agreement was passed, "recent years" had to mean years preceding 1974, and "recent" could reasonably be interpreted to mean from three to five, that is, anywhere from 1968 through 1973. So it appeared

the Japanese had agreed in 1974 to catch no more than their best year from 1968 through 1973, but in two important respects this has not proven to be true. (see *Japanses Catch of Bluefin Tuna*, Appendix C)

First, their interpretation of recent years has continued to slip with time to include each new year after 1973. That is to say, in 1976 "recent years" meant 1974 through 1976. Clearly not what was intended or understood by "recent years" in 1974.

This artful interpretation was necessary because the Japanese bluefin catch in 1974, 1975 and 1976 was suddenly much better than it was prior to 1974. The actual catch did increase, and the words of Japanese protest to the contrary are in fact just so many empty words.

With regard to the slight upswing in population curves that recent data does demonstrate, it is correct to say that there appears to be a slight upswing in bluefin tuna populations. It is not correct to say that this increase is a result of the ICCAT bluefin tuna conservation program. Fortunately in 1973 there was an unusually strong year-class that contributed much higher than average numbers of fish to the population. This was an act of nature, which ICCAT can claim no credit for, and in fact has made little effort to do so.

Quoting from the 1979 standing committee on research and statistics report at the 10th regular meeting of ICCAT: "Recruitment of the strong 1973 cohorts and average 1972 and 1974 cohorts increased juvenile abundance levels in recent years. These year-classes are now going out of the juvenile age groups, and cohorts recently recruited are evidently of low abundance so that juvenile abundance is likely depressed and may become lower. The adult stock size (age 6 plus) apparently decreased in previous years to about one-third the former level. Recruitment of the 1972, 73 and 74 cohorts into the adult stock may be expected to increase adult abundance. Last year it was noted that exploitation could have reduced the extremely abundant 1973 year-class to an average level. Recent data indicates that this did not occur and that the 1973 cohort is still quite abundant."

All that it is fair to say at this point is that we should be thankful that nature can sometimes compensate for mankind's failures.

There is an ironic twist to this particular argument from the opposition that is worth pointing out. It just may be that holding US fishermen off of the small fish produced by the unusually large 1973 year-class is about to have a beneficial (conservation) effect in that these small fish are about to enter the breeding portion of their lives. Unfortunately, they are also about to enter a period of markedly increased susceptibility to the Japanese longline fishery. Although it cannot yet be scientifically demonstrated that holding US fishermen off of these small fish has in fact led to a beneficial result, the ironic point is that if there is, and the Japanese continue to catch 8,000 bluefin tuna in the Gulf of Mexico each year, they (the Japanese) will benefit from this situation more than anyone else.

Opposition to the inclusion of tuna under FCMA asserts that highly migratory species move over large ranges of ocean and in and out of many national jurisdictions and many ocean areas where jurisdiction is still in dispute, necessitating international management.

No one can argue against the assertion that a natural resource is best managed by a regime that controls use of that resource everywhere it is found.

But the inference that you can economically (profitably) catch highly migratory species with equal ease anywhere in their range, and therefore must manage them throughout their range, is demonstrably not true. If it were true, why is it so important for US boats to fish in Mexican waters; why is it so important for the Japanese to fish in the US conservation zone (FCZ)? Or specifically, why is it so important to fish in the Gulf of Mexico?

The facts are simple. The most significant Atlantic bluefin tuna fisheries occur at times and places where fish congregate to spawn. The fat content of pre-spawning fish reaches a maximum that increases the quality and hence the value of the fish. Both the time of year and the geographic location of spawning are constant. Further, the vast majority of these areas of concentration occur within the continental sea (within 200 miles). As a generalization, it is fair to say that a migrating tuna is less available to the longline fishery than one that is milling around in relatively shallow waters like the Gulf of Mexico, feeding, or spawning, or both. Fish migrating through the Florida Straits toward the northwestern Atlantic do appear to gain an incredible amount of weight on their journey, but they are probably feeding at depths that render them significantly less susceptible to the longline fishery while en route.

There appear to be other concentrations of Atlantic bluefin tuna in the western Atlantic, off North Carolina and Massachusetts, but these appear to occur because

the fish are concentrated for some reason, perhaps spawning, or perhaps due to local concentrations of food, or due to other effects of the Gulf Stream.

The point is that highly migratory species are not equally available at all points over the extent of their range, and therefore they cannot be caught with equal efficiency at all points over the extent of their range. Conversely, there are certain areas, notably within the nutritional ocean belt associated with the continental shelf (within 200 miles), in which a single nation can significantly manage (conserve) a highly migratory stock. The Gulf of Mexico, because it is the principle spawning area for the western Atlantic (if not the only spawning area), is a prime example of such an area.

Distant water tuna interests have expended great efforts and funds to create and perpetuate the myth that tuna required international institutions, treaties, commissions, State Department offices and negotiations, etc., for management. (A glaring example of this effort is offered by the title of the Director of IATTC, James Joseph's new book, "Tunas: Fish Without a Country.") But this is a mere illusion rather than a symbolic story developed over generations of time to demonstrate a solid and fundamental truth; an illusion that no reasonable man can now accept on face value. If it is so important for US boats to fish in their "traditional grounds", in waters that Mexico now asserts it has a more significant "traditional" right to, or so important for Japanese boats to fish in US waters in the Gulf of Mexico, how can it then be argued that management applied in these specific areas would not be significant?

Opposition to inclusion of tuna under FCMA asserts that there is no scientific basis for managing Atlantic bluefin tuna on a two stock basis.

Scientific deliberations had nothing to do with the original consideration of two stock management. The original suggestion considered by the US delegation was to "treat" Atlantic bluefin tuna "as if there were" two stocks, for purely management reasons. Firstly, dividing the bluefin stock into east and west components allows the advantage that considerably more meaningful conservation agreements could be expressed, one for the eastern, and one slightly different one for the western Atlantic. For example, in the eastern Atlantic, several countries now have artisanal (subsistence) fisheries on small fish, those nominally protected by the 6.4 kg size limit agreed upon by ICCAT in 1974. These fisheries are small, and do not take numbers of fish that would influence the total eastern Atlantic population. Although the majority of ICCAT member nations agreed upon this size limitation in 1974, there were several who openly asserted (and understandably so) that they had no intention of enforcing the agreement, so again we have a few words which are meaningless, or at least do not mean what they appear or purport to mean. If management was carried out on the basis of insignificant exchanges between east and west bluefin tuna populations, different words expressing the true situation in the eastern Atlantic could be expressed which more accurately reflected the reality of tuna stocks and the national needs of eastern Atlantic member nations.

Secondly, managing on the basis of a western stock would allow another approach to the problem of Japanese longlining in the Gulf of Mexico. The Japanese catch in the Gulf in "recent years" using 1974 as the agreement date, or even using 1973 through 1975 (forgiving them their "slippage") makes their violation of the bluefin tuna conservation agreement in the years 1977, 1978 and 1979 all the more blatant. The two stock idea was simply another route toward some solution to the central problem, the inescapable reality that the Japanese are not living up to the 1974 bluefin tuna conservation agreement.

This is another attempt to confuse biological considerations with more important factors (also not fully expressed) in order to avoid and confuse the real issue. The real issue had nothing to do with whether eastern and western Atlantic stocks shared enzymatic systems and nasal parasites, or shared any other scientifically detectable identifying characteristics. The important scientific point is that western and eastern Atlantic stocks behave as if they were two separate stocks, to the extent that they could be rationally and effectively managed on that basis.

San Diego representatives have simply done all they could to avoid reasonably discussing the two stock management idea because again they see it as another facet of the more germane argument on coastal state preference.

Opposition to the inclusion of tuna under FCMA asserts that such action by the U.S. Congress would adversely impact upon US efforts to negotiate meaningful international conservation agreements for highly migratory species; for example, adversely impact upon US efforts to conclude an IATTC treaty.

Just the opposite is true. By refusing to recognize the Declaration of Santiago in 1952, and by refusing to reasonably negotiate a coastal state preference paragraph in Law of the Sea negotiations, the United States has incurred a great debt which sooner or later it will have to pay in one form or another. The duplicity involved in

protecting a few U.S. citizens who happen to make their living fishing for tuna and protecting a large industry with a powerful lobby to the detriment of the nation, has been growing more apparent for years. The damage that this de facto national fisheries policy imposed on those greater numbers of U.S. citizens involved in the domestic fishery and the relatively unorganized domestic fisheries industry finally led to the passage of the FCMA in 1975. Now there is a significant U.S. domestic longline fishery developing in the Gulf, which will fish this summer for the first time in direct head-to-head competition with the Japanese longliners. In addition to this confrontation, there is at present absolutely no provision under U.S. management for any (not one) giant tuna to be caught by U.S. fishermen in the Gulf of Mexico. The implications of this "new" situation are a small part of the long term debt the U.S. has built up for years, referred to earlier, which will have to be paid.

Opposition to inclusion of tuna under FCMA asserts that we should not "abandon international management regimes". Again, this is not the point. Or rather, it is purposefully taking a tact opposite of the exact intention of including tuna under FCMA. The prime objective of including tuna under FCMA is to strengthen existing international agencies. There is absolutely no intention of abandoning ICCAT, or IATTC, of subverting the philosophy of international management. To the contrary, including tuna under FCMA would allow more meaningful negotiations at ICCAT, and provide the State Department a greatly enhanced lever to resolve longstanding conflicts with member nations in IATTC.

Obviously some individual fishermen and the tuna packing industry would bear some of these costs, but after thirty years some thought must be given to letting those individuals and those industries bear those costs rather than the taxpayer. Admittedly there will be some fallout, but this is the natural evolution of such events. The better boats will continue to catch fish, and the industry will pass the cost along to the consumer, who will for other reasons (for example, the increasing cost of grain and subsequently pork and beef) continue to look upon tuna as a competitively priced source of protein.

Opposition to the inclusion of tuna under FCMA asserts that their position is supported by the Department of Commerce.

The Department of Commerce position on the inclusion of tuna under FCMA is determined by the State Department position because the Office of International Fisheries Affairs in the National Marine Fisheries Service functions under the treaties and policies negotiated by the Department of State. Therefore, arguments for and against the Commerce/State position can be treated as a single entity.

Opposition to the inclusion of tuna under FCMA is supported by the Department of State.

There is little evidence that there has been a serious, objective, thoughtful review of the U.S. position on extended jurisdiction, coastal state preference, and the treatment of highly migratory species since the 1947-54 era which began with the Truman Proclamation and ended with the Fishermen's Protective Act, with one highly important exception, which occurred in 1975, with the passage of the FCMA by the U.S. Congress. In the years 1969 through 1975, the Congress of the United States carefully reviewed the voluminous arguments put forth by the distant water tuna industry, the Department of State, and the Department of Defense and found those arguments lacking in substance and conviction. Those that opposed the FCMA loudly declared various forms of immediate doom would descend upon the U.S. following passage of an extended jurisdiction act. They asserted that instant devastation of the distant water tuna industry would follow, that nations of the world would close their coastal waters to fishing, navigation (ending the right of free passage), scientific investigation and even overflight of those areas, and that these events would subject the U.S. to vastly increased strategic risks.

Not a single one of these predictions has come true. Fortunately, Congress in its wisdom weighed the debate on FCMA and passed it by a vote of 208 to 101 in the House and 77 to 19 in the Senate. The immediate benefit of this legislation to the U.S. can today be counted in billions of dollars.

It was obvious in 1975 that the tuna exemption to the FCMA was inconsistent with the general intention of the act, as well as inconsistent with all the rest of its specific articles. The degree of this inconsistency is, was and continues to be a direct reflection of the power of the distant water tuna lobby. All of these arguments lead to the inescapable conclusion that the U.S. can no longer (if it ever could) afford to deal with other nations (especially our neighbors) touting high principles on the one hand while performing acts reminiscent of nineteenth century-style exploitation (commercial imperialism) on the other.

Opposition to the inclusion of tuna under FCMA asserts that "every marine biologist and marine scientist supports the proposition that highly migratory spe-

cies, such as the Atlantic bluefin tuna, can only be effectively conserved through an international regime." (see U.S. Tuna Foundation letter of March 18, 1980)

It is obvious from this flat misstatement of fact that neither Jack Bowland nor David Burney have conferred with Frank Mather of the Woods Hole Oceanographic Institute, who is the internationally recognized authority on Atlantic bluefin tuna, as well as numerous other American and Canadian marine scientists who support the inclusion of tuna under extended jurisdiction.

Opposition to the inclusion of tuna under FCMA contends that their position is supported by the "environmental community."

Groups such as the Defenders of Wildlife and Friends of the Earth have done commendable work on behalf of marine mammals, but as an umbrella group for the "environmental community", they fail to include anyone who knows anything about tuna or international fisheries negotiations. Further, none of the organizations cited by the opposition as representative of the "environmental community" are fisheries organizations. The principle fisheries conservation organizations in the U.S., the International Game Fish Association, the National Coalition for Marine Conservation, and the Sport Fishing Institute, are absolutely in accord in support of the inclusion of tuna under FCMA.

Opposition to the inclusion of tuna under FCMA asserts that at the last annual meeting of the National Fisheries Policy Conference, a long list of commercial fisheries associations supported a resolution against any amendment to the Fishery Conservation and Management Act of 1976 to expand jurisdiction over tunas.

Several domestic fishery representatives, on recollecting this event, state that at the end of the National Fisheries Policy Conference, organized by the National Fisheries Institute, they were presented with a long list of resolutions, possibly 11 or 12, as an all-inclusive statement of the conference results. The conferees were not asked to discuss each resolution item-by-item and vote upon it, but were rather asked for one vote accepting or rejecting the whole list. All of the domestic representatives with whom this point has been discussed remember being "for" the general point of the conference and "for" 9 or 10 of the resolutions and therefore voted "yea". It is also interesting to point out that at this conference there was not one single representative present to voice the opposition opinion to that expressed in the tuna resolution. Now at least one voice has spoken.

[APPENDIX A]

In the volume "World Fisheries Policy: Multi-disciplinary Views" (University of Washington Press, 1972), edited by Brian J. Rothschild, in an article entitled "International Arrangements for the Management of Tuna: A World Resource", by James Joseph, appears a very interesting quotation which underscores the divisive currents inherent in international fisheries negotiations and emphasizes the point concerning the necessity of such organizations being endowed with a sufficient authority to carry out their duties. It is particularly interesting that James Joseph, who is the Director of the Inter-American Tropical Tuna Commission, should quote William T. Burke on this point, William Burke being an international recognized lawyer from the University of Washington who is widely known for his learned legal articles of Law of the Sea matters, and who, in point of fact, was generally opposed to the idea of extended jurisdiction. It is also fair to assume that for the same reasons Dr. James Joseph was also opposed to extended jurisdiction.

Nevertheless, Dr. Joseph included the following excerpt from one of Mr. Burke's articles which appeared on page 108:

The Atlantic Tuna Conference¹ is perhaps instructive in view of the observation that "representatives of seventeen nations widely differing in interests, economic and political ideas, and in degree of development, all collaborated harmoniously to a common purpose." It is true that the delegates managed to produce a convention establishing an Atlantic Tuna Commission and in this sense harmony triumphed. However, the states involved *conferred very little authority*² on the Commission and did not even endow it with an independent staff. It is easy to produce harmony when the cost is low. The value of this experience is now likely to be great since further problems probably can be resolved only by establishing groups equipped with an appropriate staff and *with sufficient authority to deal with the problems they face*.

The point here is that even in an article by a highly intelligent, experienced man on the subject of international fisheries which has as its central tenet the importance of managing highly migratory species on an international basis, there is

¹ Referring to the early meetings, 1967 or 1969, to create ICCAT.

² Italics for emphasis mine. (Carlton.)

incontrovertible evidence that those self same experts realize the importance of enforcement capacity.

A further interesting quotation is found in an article by the scholar Edward M. Miles in a booklet entitled "Organizational Arrangements to Facilitate Global Management of Fisheries," written under a Resources for the Future program and published in June of 1974. On page 4 Dr. Miles, who is also an internationally recognized scholar in international fisheries affairs, quotes Mancur Olson and Wilbert M. Chapman as follows:

What is important is "Whether there is a sufficient degree of organized or cooperative effort" for the system to provide optimum amount of control (Olson) *In international fisheries management this clearly does not exist.*³ (Chapman.)

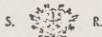
Miles goes on to quote Mancur Olson further:

We already have many international organizations—perhaps about as many as we would want—*yet national governments are unwilling to give up what they would have to give up to allow these international organizations to deal adequately with the international problems allocated to them.*³ Thus we should ask under what conditions independent countries will do what is needed to carry informal cooperation of formal organizations to a more nearly optimal point.

[APPENDIX B]

The following page is a copy of a letter from the Minister of Agriculture and Fisheries of Portugal expressing Portugal's objection to the Atlantic bluefin tuna conservation agreement. This letter is offered as a concrete example of the ease with which ICCAT member countries may not participate in a conservation program approved by the Commission.

³ Italics for emphasis mine. (Carlton.)



MINISTÉRIO DA AGRICULTURA E PISCAS
SECRETARIA DE ESTADO DAS PISCAS
DIRECÇÃO-GERAL DAS PISCAS

Mr. O. Rodriguez Martin
Executive Secretary
ICCAT
General Mola, 17
Madrid, 1

ESPAÑA

Sua referência

Sua comunicação de

Nossa referência

B-343

Data
LISBOA 19 MAR 1980

ASSUNTO Objection to the second part of the bluefin tuna regulations.

Dear Sir

With reference to your letter of January 4.1980^{as} we have done in the past (see our letter 5520, dated November 16.1978), complying with ICCAT Regulations, I want to inform you, according to instructions transmitted to me, that Portugal objects to the second part of the bluefin tuna regulation which deals with fishing mortality.

The reasons for this objection have been explained time and time again but nevertheless it is our understanding that this objection does not in any way battle against the purposes of the regulation whilst enabling Portuguese fishermen to expand their effort in the Portuguese EEZ, an expansion made absolutely imperative by the limitations imposed upon our distant water fisheries.

Yours faithfully

J. C. Esteves Cardoso
Director General

ENTRADA

C I C A A

Fecha 24 MAR. 1980

110 000 152

[APPENDIX C]

JAPANESE CATCH OF BLUEFIN TUNA; NORTH ATLANTIC OCEAN, 1971-79 IN TONS

Year	West	East ¹	Mediterranean
1971	1,532		
1972	0	562	112
1973	1,097	44	246
1974	905	2,195	2,195
1975	1,513	2,900	1,260
1976	2,500	1,700	1,000
1977	3,000	1,500	600
1978	2,300	1,500	200

¹ Does not include Mediterranean.

IN THE UNITED STATES FISHERY CONSERVATION ZONE (FCZ) ¹

Year	Atlantic	Gulf of Mexico
1978	4-5,000	2,000
1979	4-5,000	2,000

¹ Reasonable National Marine Fisheries Service estimates.

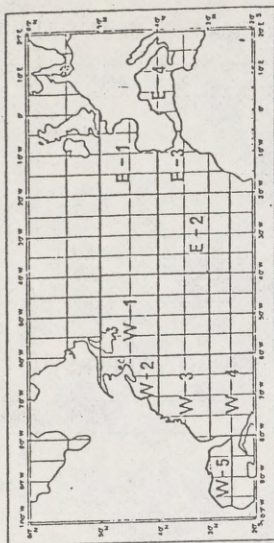


Fig. 1. Fishing areas of Japanese longliners for bluefin in the Atlantic.

P. 424, 5 from Collective Volume of Scientific Papers Vol. VIII (SCRS-1978), ICCAT. Analysis on the Atlantic Bluefin Tuna Stock Caught by Longline Fishery, Based on the Data up to 1978, by C. Shingu, K. Hisada.

Note increasing height of catch curves in W-5 (the Gulf of Mexico) after 1974.

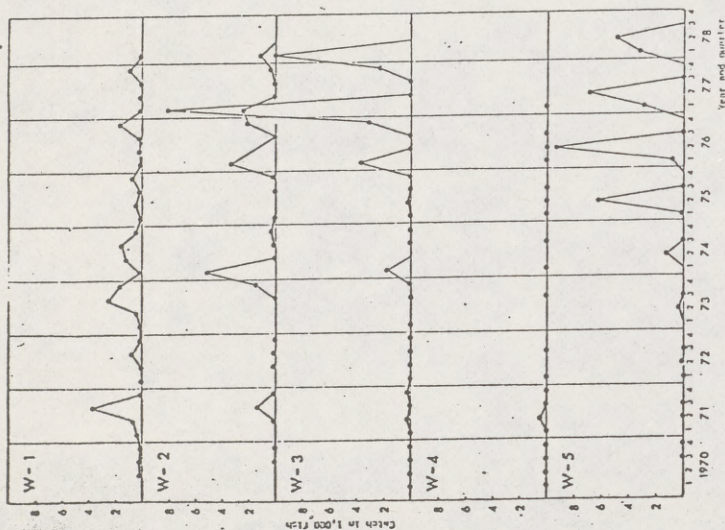


Fig. 2. Catches by area of bluefin caught by Japanese longliners in the northwestern Atlantic.

Data for 1977 and 1978 are provisional.

[APPENDIX D]

UNITED STATES TUNA FOUNDATION,
San Diego, Calif., March 19, 1980.

To: Members U.S. House of Representatives, Merchant Marine and Fisheries Committee.

From: Harold F. Cary, Executive Director.

Subject: Studds Amendment to H.R. 6310.

Testimony of the sole witness appearing before the Subcommittee on Fisheries in support of the Studds Amendment to H.R. 6310 (to place Atlantic bluefin tuna under U.S. unilateral management) stated that: "A growing number of experts subscribe to the theory that stocks in the Western Atlantic are separate from stocks in the Eastern Atlantic—".

At a public meeting of U.S. Advisors to the International Commission for the Conservation of Atlantic Tunas held March 30 in Washington, D.C., the two leading NMFS scientific experts on the subject did not subscribe to this position.

Dr. William Richards stated that ecto-parasitic studies indicate one Atlantic stock.

Dr. Michael Parrack stated that enzyme studies show no basis for separate stocks at this time.

There were other statements made by both scientists further amplifying these views. Bluefin distribution from Japanese long line fishery logs show bluefin distribution to be continuous across the Atlantic.

This information is verifiable through National Marine Fisheries Service.

We will appreciate your vote against the Studds Amendment. Such a vote will assist in maintaining a domestic tuna fishery.

[APPENDIX E]

UNITED STATES TUNA FOUNDATION,
Washington, D.C., March 11, 1980.

Dear Congressman Studds:

H.R. 6310, a bill that would extend the authorization for appropriations for fiscal years 1981, 1982, and 1983, to carry out the Atlantic Tunas Convention Act of 1975, is scheduled for markup by the Subcommittee on Fisheries and Wildlife Conservation and the Environment on March 12, 1980.

The United States tuna industry fully supports H.R. 6310, as written; however, any amendment to this bill that would bring tuna under the management regime of the Fishery Conservation and Management Act (FCMA) will be vigorously opposed by our industry.

Inclusion of any highly migratory tuna under the FCMA is opposed by the U.S. Department of State and the Department of Commerce. This inclusion would severely impact on our present international negotiations for a new regional management regime in the Eastern Tropical Pacific and severely inhibit future negotiations for access to tuna grounds in the central, southern, and western Pacific Ocean.

Denial of access to our traditional fishing grounds would have a disastrous impact on our nations last distant water fishery, a fishery that presently ranks first in our nation in landings of food fish by volume and first in dollar value.

The highly migratory nature of the tuna species makes conservation and proper management of the tuna stocks under a unilateral regime impossible. This has been attested to by almost every leading fisheries scientist involved in the studies and management schemes for the highly migratory species, tuna.

To make a change of this magnitude, one that will completely alter the U.S. position on tuna without a proper hearing, seems incredible.

We urge you to oppose any attempt to amend H.R. 6310 that would bring any or all tuna species under the Fishery Conservation and Management Act.

Sincerely,

JACK C. BOWLAND.

[APPENDIX F]

UNITED STATES TUNA FOUNDATION,
Washington, D.C., March 18, 1980.

Hon. THOMAS B. EVANS, Jr.,
*U.S. House of Representatives,
 Washington, D.C.*

DEAR CONGRESSMAN EVANS: On March 6, 1980 a hearing was held before the Subcommittee on Fisheries, Wildlife Conservation and the Environment to consider

H.R. 6310, a bill to authorize appropriations for the Atlantic Tuna Convention Act for fiscal years 1981, 1982, and 1983. At that hearing, an amendment (H.R. 4351) was offered to H.R. 6310 which would have the effect of bringing Atlantic bluefin tunas under the management authority of the Fisheries Conservation Management Act (FCMA).

During testimony taken at the hearing, the amendment to H.R. 6310 was opposed by the United States Department of State, the United States Department of Commerce and the United States tuna industry. Opposition to the amendment was based on the highly migratory nature of tuna, and the inability to conserve a highly migratory species on a unilateral basis. The amendment was also opposed on the basis of its potential adverse impact on U.S. efforts to negotiate meaningful international conservation agreements for highly migratory species.

Efforts to introduce legislation which would bring tunas such as bluefin under the management authority of the FCMA have been opposed by the environmental community as well. In 1979, a letter written on behalf of the Society for Animal Protective Legislation, Defenders of Wildlife, the Humane Society of the United States, Fund for Animals, Friends of the Earth, and the American Society for the Prevention of Cruelty to Animals, set forth the position of the environmental community. In part, the letter stated that, "unfortunately, if H.R. 3852 (a bill which would bring bluefin tuna under the management authority of the FCMA) were actually enacted into law, the overall effect would be quite deleterious, and international efforts on behalf of marine conservation, aside from the U.S. east coast would be seriously impeded. Even the consideration of H.R. 3852 has the potential for adversely impacting negotiations now underway to achieve successor Conventions to the International Convention for the Regulations of Whaling, and the Convention for Inter-American Tropical Tuna (ITTC)." A copy of said letter is enclosed.

At the last annual meeting of the National Fisheries Policy Conference, the following U.S. fishing organizations went on record in opposition to any FCMA amendments which would put tuna resources under management authority of the FCMA. Alaska Trollers Associations; American Tunaboat Association, Atlantic Off-shore Fishermen's Lobster Association; Boatowners United, Inc.; Boston Fisheries Association; Chatham Seafood; Fishermen's Marketing Association, Inc.; Massachusetts Lobstermen's Association, Inc.; National Federation of Fishermen; National Fish Meal & Oil Association; National Fisheries Institute; National Food Processors Association; National Shrimp Congress; New England Fishers Steering Committee; Otter Trawl Commission of Oregon; Pacific Coast Fishermen's Wives Coalition; Pacific Seafood Processors Association; Point Judith Fishermen's Cooperative Association, Inc.; Purse Seine Vessel Owners Association; Seafood Producers Association; Shellfish Institute of North America; Tuna Research Foundation; United States Tuna Foundation; Western Fishboat Owners Association.

A copy of the resolution passed by the National Fisheries Policy Conference is enclosed.

In addition to the organizations set forth above, the Seafarers International Union, AFL-CIO, the International Longshoremen's Workers Union and the Brotherhood of Teamsters have gone on record as opposing any effort to bring bluefin tuna under the management authority of the FCMA.

Every marine biologist and marine scientist supports the proposition that highly migratory species, such as the Atlantic bluefin tuna, can only be effectively conserved through an international regime. The International Convention for the Conservation of Atlantic Tunas (ICCAT) is such an international regime with management authority over the highly migratory bluefin tuna.

The proponents for the inclusion of highly migratory tunas under management authority of the FCMA argue that ICCAT has not been effective in carrying out its mandate to conserve bluefin tuna. Without going into the merits of this contention (this is disputed by ICCAT), it is important to point out that it is not a plausible alternative to withdraw from ICCAT. No country, including the United States, can effectively conserve a highly migratory species unilaterally. Highly migratory species must be conserved throughout their range. This can only be done through an international conservation regime. The answer is to strengthen ICCAT if that is necessary.

The proponents also argue that the United States is one of only a few countries that have not taken jurisdiction over highly migratory species that pass through their fisheries conservation zones. They insist that the United States should become a part of the majority. They fail to recognize that the United States, a leader in the resource because of support for international management of highly migratory species. While many countries have taken unilateral jurisdiction over tunas with the hope of economic gain, they have never been presumptuous enough to argue that

said jurisdiction will enhance conservation of the resource. The United States should be proud of its position, not apologetic.

We ask that you seriously study the proposed amendment to H.R. 6310 and reject it on its merit. It cannot possibly achieve the objective it seeks. Those of us who have a genuine interest in the future conservation of highly migratory species, such as tunas, must examine the applicable international conservation regime to determine its effectiveness. If it is not as effective as it should be, it should be strengthened, not abandoned. We urge you to vote against any amendment to the FCMA which would create jurisdiction over highly migratory species such as tuna.

Sincerely,

(for David G. Burney.)

Enclosures.

NATIONAL FISHERIES POLICY CONFERENCE,
Washington, D.C.

FISHERY CONSERVATION AND MANAGEMENT ACT—TUNA

Whereas, suggestions have been made to amend the Fishery Conservation and Management Act to include tuna under the management provisions of that Act, in effect, declaring that tunas are not highly migratory; and

Whereas, such amendment would be contrary to clear scientific determinations and to international management principles for tunas; and

Whereas, a change in the Act would recognize claims by coastal nations to total management control of tunas within their exclusive economic zones: Therefore, be it

Resolved, That the National Fisheries Policy Conference opposes any amendment to the Fishery Conservation and Management Act of 1976 to expand jurisdiction over tunas.

[APPENDIX G]

THE DECLARATION OF SANTIAGO

Signed in 1952 by Chile, Peru and Ecuador, the Declaration of Santiago extended coastal state jurisdiction over seabed and fishery resources up to 200 miles offshore, while continuing to grant freedom-of-the-seas navigational rights.

Appendix H

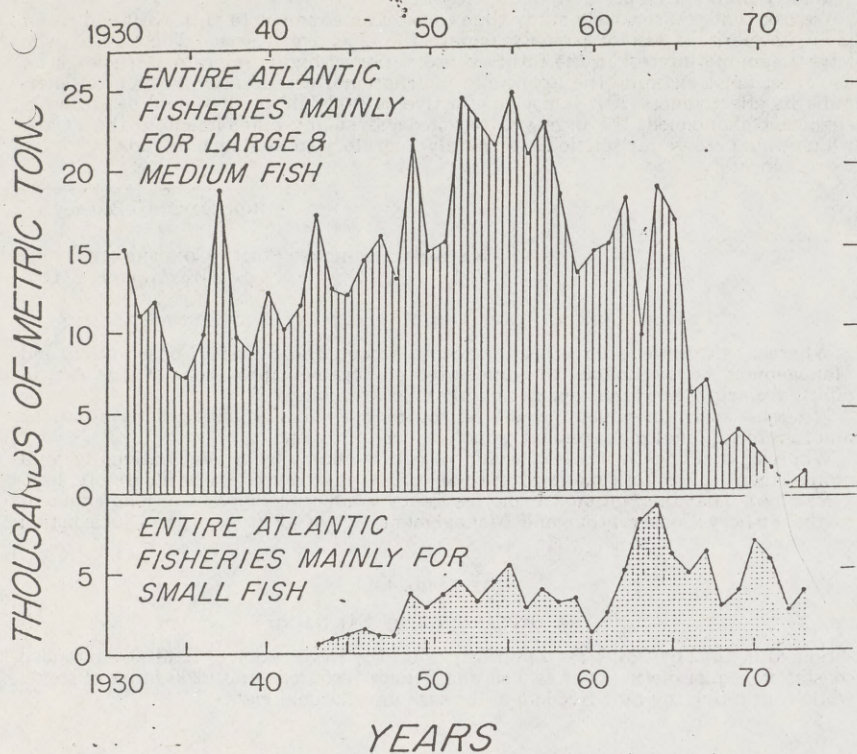
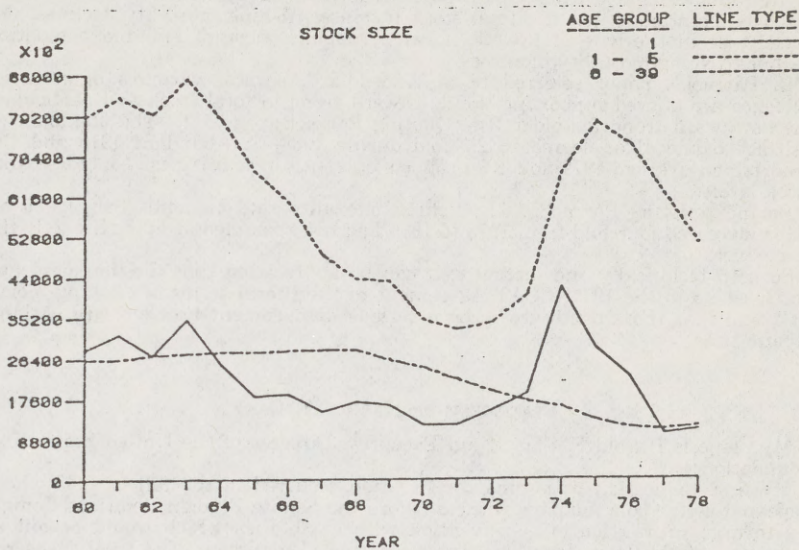
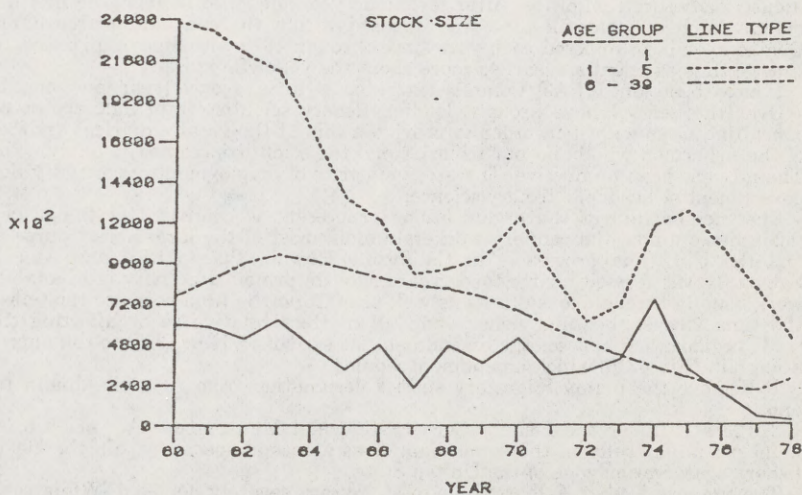


Figure 9. Total yearly catches, in thousands of metric tons, of all the Atlantic bluefin tuna fisheries shown in both Figures 1 and 8. Vertical lines indicate fisheries mainly for medium and large fish. Squares indicate fisheries mainly for small fish.

(from Frank J. Mather III, Trends in Bluefin Tuna Catches in the Atlantic Ocean and the Mediterranean Sea, 1974.)

Appendix I

Total Atlantic Stock SizeWestern Atlantic Stock Size

(from M.L. Parrack, Trends of the Abundance and Age Structure of Atlantic Bluefin Tuna, 1979.)

[APPENDIX J]

In the paper, the 1974 ICCAT Agreement is discussed in terms of minimum size and catch limitations. Catch limitations as such were used for discussion rather than the more complex technical term of fishing mortality. Fishing mortality refers to the number of fish caught as a percentage of those available, so that if actual catch is maintained and the total stock increases, fishing mortality declines. Conversely, as in the case of ICCAT, if catch remains constant and the populations declines, fishing mortality increases.

In Parrack's paper referred to in Appendix I, several varieties of statistical evidence are offered supporting the downward trend in total stock and particularly the downward trend for older fish. Quoting Parrack (page 13): "The abundance of fish age 6 and older decreased 2.5 fold during 1968-77. Abundant 1973 and 1974 cohorts and average 1972 and 1975 cohorts currently recruiting may increase adult stock levels."

Further quoting Parrack: "The fishing mortality rate on adult fish age 6 and older increased four fold from 1973 to 1976 and has remained at approximately that level since."

So both technically and factually, it can be appreciated that the Japanese have not lived up to the 1974 ICCAT Agreement in the literal terms of "fishing mortality", and that there continues to be a serious management problem with Atlantic bluefin tuna.

STATEMENT OF HAROLD F. CARY

My name is Harold F. Cary. I am Executive Director of the United States Tuna Foundation.

My first connection with tuna conservation occurred in the fall of 1948 when I appeared as the sole industry witness before the Senate Foreign Relations Committee to urge ratification of a convention with Costa Rica which would permit the activation of the Inter-American Tropical Tuna Commission. The treaty was ratified. The IATTC began its work in 1949. I believe this was the first time in any fishery where resource investigations were undertaken before there was any problem concerning any part of the resource. I served as the first chairman of the industry advisory committee. After seventeen years of work, in 1966, the first quota on the catch of yellowfin tuna was imposed within the convention area (CYRA). Quotas have been imposed each year since through 1979 with steady increases from time to time as scientists learned more about the yellowfin stocks.

I have been an ICCAT Commissioner for a little over a year and one half.

Over the years I have brought leading fishery scientists into industry or on a consulting basis with it in order to provide a mix of the great empirical knowledge of the fishermen who build our fisheries and the scientists trained to analyze them. The mix has been productive. The great majority of employment opportunity lies in government or academic fishery science.

The membership of the organization I represent is composed of the principal fishermen's union, the cannery workers' union, most of the large vessel purse fleet and the U.S. tuna processors in California, Hawaii, Puerto Rico and American Samoa. It was formed nearly three years ago. Its principal activity is in analytical work usually through consultants as well as staff on the tuna-porpoise relationship, the tuna stocks, the tuna fishery and all matters relating to or affecting them.

My organization opposes the amendment (as set out in H.R. 4357) to the appropriation bill (H.R. 6310) which amendment would:

1. Remove the highly migratory species designation from Atlantic bluefin tuna, and

2. Place it under the Fishery Conservation and Management Act of 1976 to be managed unilaterally in the same manner as a coastal species within the 200-mile fishery conservation zone of the United States.

The premise is that Atlantic bluefin stocks are severely depleted. While catches declined in the early 1970's, ICCAT reports show that they increased in 1974 and have run at a reasonably stable level since.

In our view the proposed amendment is not in the national interest because of the change in principle involved as well as the costs and losses it would create in our fishery economy. These are briefly noted as follows:

1. *The principle involved*

The principle is that tunas are highly migratory species that can be efficiently conserved only through international cooperation and agreement.

This is the principle on which the tuna fisheries of the United States have been built. This represents the practical basis which the principal tuna producing nations have followed.

The proposed amendment destroys this principle by saying, in common terms: Atlantic bluefin is not migratory and we own that species found within our 200-mile zone. It also asserts that we can conserve these stocks by our unilateral management as in the case of a coastal stock.

Because the principle can have so broad an application to all tuna fisheries, the amendment cannot be considered a local issue involving only a few tons of fish.

2. The message conveyed

The assertions of ownership and effective conservation made by the proposed amendment would signal to any nation, within whose 200-mile zone any species of tuna appeared, that it would be affirmed in any decision to claim ownership, and in its ability to conserve the species efficiently.

The United States has taken the lead in fisheries conservation. This is particularly true as it concerns the tuna species and is found in its sponsorship and participation in the Inter-American Tropical Tuna Commission (IATTC) which began its work in 1949, in its sponsorship of and participation in the International Commission for the Conservation of Atlantic Tunas (ICCAT) which began its work in 1971 and its participation in the many conferences concerning conservation of tunas wherever held in the world. In all these forums the U.S. has clearly stated the migratory nature of the species and that efficient conservation requires international cooperation and agreement. A change in this position called for by the amendment would threaten conservation as well as the efficient use of the tuna resources.

A change in this position would vitally affect the principal tuna fisheries of the United States and the industrial activity built upon them.

3. The costs imposed by the amendment

These are several:

a. The loss of the majority of our largest food fish fishery which in total, based on 1978 figures (Fisheries of the United States, 1978) was valued at \$239,000,000. Tuna represented 29 percent of all food fish landings value (and 24 percent of volume in 1978). (Exhibit 1.)

Canned tuna production was valued at over \$1,270,000,000 in 1978 representing well over 70 percent of the value of all canned fish and shellfish. (Exhibit 7.)

As a part thereof, severe damage would result to the economy of Puerto Rico where tuna products shipments in 1978 were valued at \$587,000,000 and represented the Commonwealth's most important category of shipments. (Exhibit 2.)

The policy would also have an adverse effect on American Samoa where tuna processing is by far the principal business activity of the island. (Exhibit 2.)

b. On the assumption that the level of tuna processing in the United States could be maintained, the United States balance of trade would be adversely affected by importing tuna sufficient to fill the gap created.

Imports of edible fishery products of all categories totalled \$2.3 billion in 1978. Tuna in all forms represented \$391 million of this. Replacement of a large part of our high seas production which exceeded \$207 million in 1978 would materially increase imports and further adversely affect our balance of trade. (Exhibit 3.)

The loss of employment, skills, investment, production and the increase in imports would be very high based on the measurements used to determine our national fisheries position.

c. An unquantifiable cost which would set the foregoing in motion would be the United States negotiating position should the amendment be passed. We would then have declared ownership of one species of tuna and this would affirm the right of others to do the same.

What is important here is cooperation and agreement are needed as every nation fishing tuna on a meaningful scale fishes in the high seas off other coasts as well as its own. This is true in the Atlantic as well as in the Pacific.

A comparison on U.S. landings of bluefin in the Atlantic and the Pacific as well as a comparison of Atlantic bluefin with all other tuna landings is attached. (Exhibit 8.)

While the differences are great, this does not mean that our Atlantic bluefin fisheries are not important. They are. In our view they can be expanded. In our view the discussions with the Japanese which have been reported as productive should continue. Development of support for needed information on the stocks should continue through ICCAT as noted by the Santander workshop.

A review of the overall costs in impairment of ability to negotiate agreements which most tuna nations (not only the United States) that the proposed amendment is not in the national interest.

4. *Positive steps that can be taken*

a. The United States should continue its financial support of the International Commission for the Conservation of Atlantic Tunas (ICCAT).

b. As a part thereof and because of the concern expressed over bluefin specific financial support should be given to recommendations of the Bluefin Workshop which include: (1) Establishing a permanent ICCAT Working Group on Bluefin Tuna; (2) Maintaining a central data base at ICCAT; and (3) Providing help on catch sampling and data collection.—(From page 6 of Report COM. SCRS/79/25.)

c. Discussions between the United States and Japan should be encouraged in order to continue and extend the cooperation that has existed with respect to conservation. Japan has a great knowledge and provided the majority of information on bluefin and other species.

d. The National Marine Fisheries Service should be asked to provide information whereby our fishermen can develop a meaningful fishery in those areas where bluefin are known to be present but no effort exists. In all area emphasis should be on increasing the ability to compete consistent with the ability of the stock to maintain itself within scientifically sound limits.

[EXHIBIT 1]

Source: Commercial Landings of Fish and Shellfish by U.S. Fishing Craft by Species, by Distance Caught off U.S. shores and in International Waters (page 8-11), Fisheries of the United States, 1978

1. *Value of the tuna fisheries 1978*

All fish value	\$933,430,000
Less industrial fish (Menhaden, Anchovy).....	103,817,000
Total food fish (100 percent).....	829,623,000
Tuna (29 percent).....	238,985,000

2. *Volume of the tuna fisheries 1978*

	Pounds
All fish volume	5,014,209,000
Less industrial fish	2,630,393,000
Total food fish (100 percent).....	2,383,816,000
Tuna (24 percent).....	565,691,000

[EXHIBIT 2]

Source: Processed Fishery Products, Annual Summary 1978—NMFS Current Fisheries Statistics.

1. *Value of U.S. processed fishery products (including Puerto Rico and American Samoa)*

Total (100 percent).....	\$4,467,311,000
Tuna (29 percent).....	1,273,260,000

2. *Value of processed products*

Puerto Rico.....	\$587,478,000
Hawaii and American Samoa.....	200,187,000

[EXHIBIT 3]

Source: Imports and Exports of Fishery Products Annual Summary 1978—NMFS Current Statistics No. 7805.

1. Total imports entered for consumption in 1978.....	\$3,097,757
2. Total imports of edible fishery products (100 percent).....	2,224,717,000
Total imports of tuna in all forms (frozen, canned, etc.) (18 percent).....	390,976,000
3. Total imports of fresh or frozen edible fishery products (100 percent).....	1,161,670,000
Total imports of fresh or frozen tuna (28 percent).....	327,155,000
4. Total imports of canned fish (100 percent).....	137,183,000
Total imports of canned tuna (46 percent).....	63,389,000

[EXHIBIT 4]

Source: Proceedings of the Sixth Regular Meeting of the Commission (ICAAT) (page 64) November 7-20, 1979.

Potential yield-per-recruit has probably increased on both sides of the Atlantic as a result of the current minimum size limit of 6.4 kg. However, yield-per-recruit analysis showed that additional increases could be obtained in raising the minimum size limit. The present minimum size limit should certainly be maintained, and if practical measures to achieve a higher effective size-at-first-capture are derived, the size limit should be increased.

Actions in accordance with the Commission's recommendation to limit fishing mortality appear to have been generally effective in terms of stabilizing fishing mortality rates. This has led to some increase in spawning stock abundance from recent recruitment. The Committee recommends that the present controls on fishing mortality be maintained.

The Committee examined the stock structure of the Atlantic bluefin for a number of years, but the answer to this problem is still not clear. However, it appears that management based on the separate stock premise might be a more efficient method of conserving Atlantic bluefin tuna stocks.

Since the general type of measures needed are the same under both hypotheses of stock structure, no major change in management practices are implied.

The Committee pointed out that:

(i) In the event that there are two stocks, changing the area of operation of fisheries from one stock area to the other results in a differential change in the fishing mortality exerted on the two stocks.

(ii) Where agreement can be reached on further measures to conserve the stock on one side of the Atlantic, implementation of these measures need not await agreement on uniform Atlantic-wide implementation.

(iii) Failure to manage the stock on either side of the Atlantic could have serious repercussions on the other.

There are other recommendations regarding bluefin research, statistical analysis and subsequent evaluation of the status of the Atlantic-wide resource which will appear in the discussion of the general research requirements.

[EXHIBIT 5]

Source: Proceedings of the Sixth Regular Meeting of the Commission (ICCAT) (page 62-63) November 7-20, 1979.

BLUEFIN

*c-V.4. Current appraisal**c-V.4.i. Eastern Atlantic and Mediterranean*

Analysis of data from eastern Atlantic fisheries suggested that the size of the bluefin tuna stock is increasing over levels of previous years. The 1974 cohort was apparently larger than those of 1969-1972 and should be recruiting into the adult (age 6 and over) stock in the near future. If pre-adult catches do not increase, increases in the adult stock may be expected. There is some indication that the 1977 cohort was weak, so that present juvenile abundance is probably not high.

c-V.4.ii. Western Atlantic

Abundance trends estimated from mark-recapture data and cohort analysis of the juvenile (age 1-5) stock reflect not only size of recruiting cohorts but also magnitudes of juvenile fish catches (SCRS/79/98). The apparent decline in juvenile stock size during 1961-67 was concomitant with high removals and a very slight downward trend in recruitment. The downward trend in abundance during 1970-72 also occurred with high catches of juvenile fish. Recruitment of the strong 1973 cohorts and average 1972 and 1974 cohorts increased juvenile abundance levels in recent years. These year classes are now growing out of the juvenile age group and cohorts recently recruited are evidently of low abundances so that juvenile abundance is

likely depressed and may become lower. The adult stock size (age 6 and over) apparently decreased in previous years to about one-third the former level. Recruitment of the 1972, 1973, and 1974 cohorts into the adult stock may be expected to increase adult abundance. Last year it was noted that exploitation could have reduced the extremely abundant 1973 year-class to an average level. Recent data indicated that this did not occur and that the 1973 cohort is still quite abundant.

c-V.4.iii. Total Atlantic and Mediterranean

Juvenile stock size decreased to 40 percent of the 1964 level by 1971 (Fig. 14). Sizable stock increases were realized with recruitment of the 1973, 1974 and 1975 year-classes. As of 1978 juvenile stock size appears to be slightly average, however, sizable decreases will be realized as the very weak 1976 and 1977 cohorts dominate the juvenile age group.

Adult fish stock size decreased 60 percent during 1968-77. Recruitment of the 1973, 1974, and 1975 cohorts into the adult stock may be expected to increase adult stock size during 1979 and 1980 if exploitation of these cohorts is not increased. Although considerable progress was made during the last year toward compiling a comprehensive and accurate catch inventory, those catches from the Mediterranean, particularly of age 1 fish used in this virtual population analysis, are believed to be incomplete and those inaccuracies may have affected stock size estimates.

[EXHIBIT 6]

Source: Proceedings of the Sixth Regular Meeting of the Commission (ICCAT) (page 63) November 7-20, 1979.

BLUEFIN

c. VI. Effects of Regulations

c. VI.1 Minimum size limit

The 6.4 kg minimum size limit was adopted in 1975 to reduce the catch of very young fish. The western Atlantic proportional catch of age 0 and 1 fish decreased from 21.7 percent before the regulation to 3.3 percent after its adoption (Table 5). In the eastern Atlantic the situation is not so clear. For example, the estimated proportion of age 1 fish in the Bay of Biscay catches did not decrease. In fact, average percent of undersized fish caught was 5.5 percent before the regulations and 32.5 percent after. However, the majority of this increase was due to a single year's catch. This increase was due to the very large catch of the 1977 year-class in 1978. Provisional 1978 statistics indicated the Bay of Biscay catches comprised only 1.6 percent, an obvious improvement. The Moroccan purse seine catches are almost entirely composed of age 1 fish, both before the regulation and after, and that catch as decreased. Catches of undersized fish by the French Mediterranean purse seine fleet were low both before and after the regulation. Although the estimates of catch at age 0 and 1 for the entire eastern Atlantic are believed to be under-estimated, the available data indicate that a decrease from 59 percent to 41 percent occurred after the regulations.

c. VI.2. Fishing mortality limit

The effects of actions adopted in 1975 to limit fishing mortality to the levels of recent years can be evaluated in part by examining trends in available estimates of fishing mortality rates. Current levels of juvenile fish (age 1-5) in the west Atlantic (SCRS/79/98) seem to have stabilized in that area at a relatively low level since 1976. Estimates of adult (age 6) fishing mortality in the west Atlantic indicated that levels were low and stable from 1960-1973 and sharp increases occurred after 1973. From 1973 to 1974 a twofold increase occurred. Further increases occurred in 1975 and again in 1976. Adult mortality rates have not increased since then (SCRS/79/58,98).

The French-Spanish baitboat small bluefin fishery catch in the Bay of Biscay increased by 683 MT in 1978 over 1977. However, the Moroccan purse seine fishery showed a decline of 626 MT in the same period. As noted in SCRS/79/60, the Bay of Biscay fishery exploits the same fish that occur along the Moroccan coast. Hence, these observations suggest the overall catch did not increase. There is no evidence to suggest that fishing mortality has increased in recent years.

[EXHIBIT 7]

PROCESSED FISHERY PRODUCTS, CANNED FISHERY PRODUCTS

[Production of canned fishery products, by species, 1977 and 1978]

Species	Pounds per case	1977			1978		
		Standard cases	Thousand pounds	Thousand dollars	Standard cases	Thousand pounds	Thousand dollars
FOR HUMAN CONSUMPTION							
Fish:							
Gefiltefish.....	48	268,515	12,889	7,531	267,389	12,834	8,575
Herring and herring specialties.....	48	138,862	6,665	7,114	95,020	4,561	5,837
Jack mackerel.....	45	686,445	30,890	11,869	579,377	26,072	7,242
Roe and caviar.....	48	17,939	861	6,038	18,177	872	4,025
Salmon:							
Natural.....	48	3,142,156	150,823	243,340	3,421,650	164,239	248,425
Specialties.....	48	2,917	140	539	1,635	78	401
Sardines, Maine.....	23.4	1,004,108	23,496	27,205	1,127,171	26,376	35,641
Tuna:							
Solid.....	21	6,279,135	131,862	239,319	5,599,087	117,580	242,182
Chunks.....	19.5	20,857,776	406,727	655,140	29,547,641	576,179	1,025,832
Flakes and grated.....	18	523,326	9,420	12,155	757,577	13,636	19,631
Total tuna.....		27,660,237	548,009	906,614	35,904,305	707,395	1,287,646
Specialties.....	48	4,136	199	149	6,105	293	274
Tunalike fish ¹		473,298	9,494	10,635	180,791	3,582	3,571
Other.....		149,283	7,166	5,019	115,149	5,527	4,087
Total fish.....		33,547,896	790,632	1,226,053	41,716,769	951,829	1,605,724
Shellfish:							
Clams:							
Whole and minced ²	15	760,954	11,414	26,269	689,432	10,341	24,668
Chowder and juice ²	30	2,068,950	62,068	38,252	1,964,069	58,922	34,927
Specialties.....	48	148,556	7,131	7,050	89,280	4,285	4,480
Crabs:							
Natural.....	19.5	257,055	5,013	19,340	255,651	4,985	22,286
Specialties.....	48	6,882	330	313	7,700	370	369
Oysters:							
Natural ³	7	146,735	1,027	2,687	84,328	590	1,337
Specialties.....	48	192,086	9,220	6,423	225,738	10,835	8,592
Shrimp:							
Natural ³	6.75	3,633,346	24,525	71,336	2,334,509	15,758	45,845
Specialties.....	48	45,775	2,197	1,942	30,707	1,474	1,305
Squid.....	48	141,438	6,789	2,218	184,835	8,872	2,502
Other.....		69,051	3,314	2,651	42,408	2,036	2,176
Total shellfish.....		7,470,828	133,028	178,481	5,908,657	118,468	148,487
Total for human consumption.....		41,018,724	923,660	1,404,534	47,625,426	1,070,297	1,754,211
FOR BAIT AND ANIMAL FOOD							
Animal food.....	48	10,672,247	512,268	165,686	12,401,543	595,274	222,608
Salmon eggs, et al.....	48	8,641	415	4,469	7,505	360	2,905
Total for bait and animal food.....	48	10,680,888	512,683	170,155	12,409,048	595,634	225,513
Grand total.....		51,699,612	1,436,343	1,574,689	60,034,474	1,665,931	1,979,724

¹ Standard cases 48 cans, solid pack (7 oz net each) contains 21 lb; chunk (6.50 oz net each) 19.5 lb; and flakes and grated (6 oz net each) 18 lb.

² "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products.

³ Drained weight.

Note.—Final figures will be published in "Canned Fishery Products, Annual Summary, 1977 and 1978," Current Fishery Statistics No. 7501 and 7801.

[EXHIBIT 8]

U.S. TUNA LANDINGS

Source: Fisheries of the United States 1978 (page IX and page 10).

	Pounds
<i>Bluefin</i>	
Atlantic ¹ (IX)	3,300,000
Pacific (10)	10,944,000
Total	14,244,000

¹ The report to the U.S. ICCAT Advisory Committee Oct. 30, 1979 given these higher figures for Atlantic bluefin: Commercial Catch 1,784 metric tons or 3,932,000 pounds; Sport fishing 68 metric tons or 149,900 pounds.

	Pounds
<i>All tuna species</i>	
U.S. Catch	565,691,000
Atlantic bluefin using Advisory Committee figures:	
Commercial	3,935,000
Sportfishing	149,900

The CHAIRMAN. The next panel is Frank Alverson, vice president and chief scientist, Living Marine Resources, Inc.; Gordon Broadhead, Chairman, U.S. Advisory Committee to ICCAT; David Burney, general counsel, U.S. Tuna Foundation; Steve Edney, president, United Cannery and Industrial Workers of the Pacific AFL-CIO; August Felando, president, American Tunaboat Association and member of U.S. Advisory Committee to ICCAT; and George Steel, Washington representative of the American Tunaboat Association.

STATEMENTS OF PANEL 4, CONSISTING OF FRANK ALVERSON, VICE PRESIDENT AND CHIEF SCIENTIST, LIVING MARINE RESOURCES, INC.; GORDON BROADHEAD, CHAIRMAN, U.S. ADVISORY COMMITTEE TO ICCAT; DAVID BURNLEY, GENERAL COUNSEL, U.S. TUNA FOUNDATION; AUGUST FELANDO, PRESIDENT, AMERICAN TUNABOAT ASSOCIATION AND MEMBER OF U.S. ADVISORY COMMITTEE TO ICCAT; GEORGE STEELE, WASHINGTON REPRESENTATIVE OF THE AMERICAN TUNABOAT ASSOCIATION; FRED SOMERS, UNITED CANNERY AND INDUSTRIAL WORKERS OF THE PACIFIC AFL-CIO; AND CAPT. GEORGE SOUSA, DIRECTOR, AMERICAN TUNABOAT ASSOCIATION

Mr. BURNLEY. We also have Captain George Sousa, director of American Tunaboat Association.

The CHAIRMAN. Mr. Sousa, we certainly appreciate your being here.

Mr. BURNLEY. Mr. Fred Somers is sitting in for Mr. Steve Edney, who is ill.

The CHAIRMAN. We will start with Frank Alverson. Or did you want to start off?

Mr. BURNLEY. If you do not mind.

The CHAIRMAN. Fine. Dave, you start off.

Mr. BURNLEY. I have submitted a statement for the record, Mr. Chairman.

The CHAIRMAN. All the statements will be included in the record in their entirety. I would ask you to briefly go into it so that we can get to some questions.

[The prepared statement follows:]

STATEMENT OF DAVID G. BURNEY, UNITED STATES TUNA FOUNDATION

Mr. Chairman and the members of the House Committee on Merchant Marine and Fisheries, on behalf of the United States tuna industry, we welcome this opportunity to testify in support of H.R. 6310, a bill which will extend the authorization for appropriations for fiscal years 1981, 1982, and 1983, to carry out the Atlantic Tuna Convention Act of 1975. The United States tuna industry applauds the introduction of H.R. 6310 as a reaffirmation of the United States juridical position on the highly migratory species, such as tuna, and a continued willingness to work for an effective international management regime.

The migratory nature of tuna makes conservation of the many species and management of the extensive fisheries for them difficult. Yet conservation is particularly important as technological advances in fishing gear and methods, coupled with the ever growing demand for tuna, continue to increase the fishing pressure on global stocks of these fish. If people all over the world are to continue to harvest tuna, effective conservation is essential. Since these fish migrate through the jurisdictions of many nations, effective conservation requires international cooperation.

The United States tuna industry is concerned over the introduction of H.R. 4351, a bill which would amend H.R. 6310 to bring Atlantic bluefin tunas under the management authority of the Fisheries Conservation and Management Act (FCMA). During testimony taken March 6, 1980, before the House Subcommittee on Fisheries Wildlife Conservation and the Environment, H.R. 4351 was opposed by the United States Department of State, the United States Department of Commerce and the United States tuna industry. Opposition to the amendment was based on the highly migratory nature of bluefin tuna and the recognized inability to conserve a highly migratory species on a unilateral basis. The amendment was also opposed on the basis of its potential adverse impact on U.S. efforts to negotiate meaningful international conservation agreements for highly migratory species.

As this Committee is well aware, efforts in 1979 to bring Atlantic bluefin tuna under the management authority of the FCMA were opposed by the National Fisheries Policy Conference and the environmental community as well. The environmental community expressed concern at that time that such an effort to bring bluefin tuna under the management authority of the FCMA would be quite deleterious to the conservation of the resource and additionally argued that international efforts on behalf of marine conservation would be seriously impeded. The tuna industry agrees with that assessment.

The FCMA provides that the exclusive management authority of the United States shall not include or be construed to extend to highly migratory species of fish. Highly migratory species of fish are defined by the FCMA to mean species of tuna which in the course of their life cycle spawn and migrate over great distances in waters of the ocean. As pointed out by the National Marine Fishery Service, "Tagged northern bluefin tuna have been found to travel at least 4,830 miles across the Atlantic Ocean in 119 days and are believed to be capable of undertaking journeys nearly equal to circum-navigating the earth". It is impossible to conceive how such a species could be managed within a small segment of its range.

Proponents of the proposed amendment (H.R. 4351) have raised the following points which are responded to herein:

Statement 1. The tuna industry maintains that if you can not manage a highly migratory species on an international basis, it is preferable to do nothing.

Response. This is obviously untrue and without foundation. The tuna industry does support international management of highly migratory species and believes that this can only be achieved through persistent negotiation by a conservation oriented country such as the United States. We cannot accept failure in this endeavor.

Statement 2. There is little if any reality to international natural resource management regimes that have no enforcement capacity.

Response. It should be pointed out that enforcement capacity is only necessary if the international regime is being violated. Whether an enforcement program is necessary to carry out the full mandate given to ICCAT should be the subject of further investigation. If an enforcement program is necessary, one should be initiated through the ICCAT organization. The plain truth is a unilateral enforcement program by one nation is not sufficient to conserve the resource. While it may be laudatory, it is not effective.

Statement 3. The San Diego representatives (U.S. tuna industry) would rather have the argument (whether or not bluefin tuna should be placed under the management authority of the FCMA) be discussed in biological terms which tend to obscure the real issues. They go on to state that, "the real issue would entail an objective reassessment of U.S. tuna interests versus other U.S. national needs and priorities".

Response. It is true that United States tuna industry's position is that the Fisheries Conservation Management Act was passed for the purpose of assuring future conservation of fishery resources found within the fishery conservation zone. It is also true that the United States tuna industry believes that ICCAT was created for the primary purpose of conserving certain highly migratory fishery resources found in the Atlantic Ocean. For these reasons, it would appear that the biological aspect of the bluefin tuna issue should receive a high priority.

If we are to address the assessment of the U.S. tuna industry versus other U.S. national needs and priorities, we would have to consider the value of the resource sought to be protected by the proposed amendment (value of bluefin tuna found within the fishery conservation zone of the United States) versus the potential adverse impact the amendment would have on the conservation of the Atlantic bluefin resource and the potential adverse impact on the availability of tuna presently harvested by the U.S. high seas distant water tuna fleet. Even proponents of the proposed amendment would agree within the fishery conservation zone of the United States, is miniscule compared to the value of the bluefin tuna resource as a whole combined with other tunas harvested by the United States high seas distant water tuna fleet.

Statement 4. The United States desperately needs congenial relationships with Mexico, other Central and South American nations, and Canada.

Response. While this is certainly desirable, these relationships can not be won through meaningless conciliation on the part of the United States. As Congressman Gerry Studds is well aware, we cannot condone a fishery treaty just to enhance a relationship if it is not in the best interest of the United States. While Congressman Studds has openly opposed the proposed U.S.-Canadian fishery treaty, he certainly has not advocated that we break off diplomatic relations with Canada.

While we must always be aware of our relationships with neighbors, we must also earn their respect by negotiating in good faith towards an equitable understanding. I hope that this country has not reached the point that we are prepared to concede on all issues when negotiating with our neighbors just for the sake of retaining their friendship. The United States' position on highly migratory species, while unpopular with several of our neighbors, cannot be questioned when conservation is the topic under consideration. We should never forget this.

In addition it should be noted that the United States tuna fishermen have contributed heavily to the development of tuna fisheries of many nations in North America, South America, Africa, and the Pacific Islands. If a restrictive system of unilateral controls had been in effect, the expansion for not only the United States, but for many other nations would have ranged from nonexistent to minimal. If a restrictive system is introduced to the tuna fishery world, it would limit expansion with a resultant reduction in catch and a tremendous increase in cost and therefore prices to the consumer.

Statement 5. The U.S. negotiating position on the ongoing IATTC negotiations would be enhanced if the United States would recognize coastal state preference over highly migratory species.

Response. This statement is particularly interesting since the view expressed is not shared by the Department of State, the agency charged with the responsibility for negotiating international fishery agreements on behalf of the United States. It is well recognized that the United States, through the Inter-American Tropical Tuna Commission, the International Commission for the Conservation of Atlantic Tunas and the International Whaling Commission has long been the standard bearer for conservation of highly migratory species.

The proponents of the proposed amendment have long argued that tuna should be brought under the management authority of the FCMA in order to bring U.S. policy in line with that of a majority of other nations in claiming jurisdiction over tunas. This completely ignores the fact that nearly 80 percent of the world's catch of market species of tuna is produced by Japan, United States, South Korea, Taiwan, Spain, and France. All of these nations endorse the scientifically based highly migratory species concept upon which the FCMA tuna provisions are premised. Of equal importance is the fact that these nations perform and have sponsored nearly all the world's research on tuna species.

Statement 6. The nation's tax payers have been asked to bear an inordinate amount of expense for a free lunch in the form of the Fishermen's Protective Act which has cost U.S. tax payers millions of dollars and caused incalculable damage to U.S. domestic marine resources.

Response. I am not sure of the basis for the statement; however, it should be pointed out that the Fishermen's Protective Act provides a mechanism for recovering all the monies expended pursuant to the Act, through deductions from the foreign assistant programs of the subject nation.

It really all comes back to the same issue, whether or not you believe that highly migratory species can be and should be managed on a unilateral basis. The United States has taken the position that this is not realistic and has backed this position with the Fishermen's Protective Act. Without this Act, we would have no distant water fishing fleet and we would appreciably reduce our ability to negotiate international conservation agreements.

Statement 7. It is not true that you can catch highly migratory species with equal ease anywhere in their range, and therefore they don't have to be conserved throughout their range. If this were true, why is it so important for U.S. boats to fish in Mexican waters.

Response. No one has ever argued that it is easy to catch any highly migratory species anywhere. The argument that has been made is that you can only conserve a highly migratory species if conservation takes place throughout the range.

It may be true that there are certain areas where highly migratory species congregate during the course of a calendar year. It may also be true that if you protect the resource at that location during that time of the year you will have succeeded in partial conservation. The problem is that the highly migratory species move on. Unless conservation is extended to the new area where the species congregates, you have lost everything you have gained in the earlier partial conservation.

It is true that the United States tuna industry fishes in waters claimed by the government of Mexico. It is also true however that the government of Mexico's tuna vessel fish in waters claimed by other countries. This is the nature of the international tuna fishery.

Statement 8. It was obvious in 1975 that the tuna exemption to the FCMA was inconsistent with the general intention of the Act, as well as inconsistent with all of the rest of its specific articles.

Response. This is a preposterous statement. It is obvious that the FCMA was designed to protect equally the national interests in all species of fish and shellfish, whether coastal, shelf, anadromous, or migratory. While it is often said that the FCMA exempts tuna, this is incorrect. Tuna is covered by the Act. What distinguishes it from other species is that it is designated for what it is—highly migratory—and because of this, it is subject to management by international agreement as the logical way to insure conservation. The FCMA clearly recognizes that tuna, as a migratory species, cannot effectively or efficiently be managed by this nation or any other single nation.

In the final analysis, recognition that tuna is highly migratory does not result from the FCMA, policy or political decisions, but from clear scientific determinations about the tuna species and its well known characteristics. Dr. James Joseph, Director of Investigation for the Inter-American Tropical Tuna Commission, and a leading authority on management of highly migratory species, has written a paper entitled "The Management of Highly Migratory Species." Dr. Joseph explains the problem of managing highly migratory species as follows: "Management (of highly migratory species) cannot be applied affectively over a portion of a stock's range, because what happens in another portion of its range will affect the entire stock . . . , if coastal states alone were to be given management authority for highly migratory species, they might well find themselves, as a result of over-fishing in mid-ocean, exercising sovereign rights over 200 miles of empty water."

While many countries have taken unilateral jurisdiction over tunas with the hope of economic gain, they have never been presumptuous enough to argue that said jurisdiction would enhance conservation of the resource. The United States should be proud of its position on highly migratory species such as tuna, not apologetic.

We ask that you seriously study the proposed amendment to H.R. 6310 and reject it on its merits. It cannot possibly achieve the objective it seeks. Those of us who have a genuine interest in the future conservation of highly migratory species such as tuna, must examine the applicable international conservation regime to determine its effectiveness. If it is not as effective as it should be, it should be strengthened, not abandoned. We urge you to vote against any amendment to the FCMA which would create jurisdiction over highly migratory species such as bluefin tuna.

Mr. BURNEY. If I could clarify a couple of points that have been raised earlier that I think are very important.

I still feel I am in court, Mr. Chairman, on the tuna/porpoise hearings, and I keep thinking I am back before another judge.

I would like to clarify several points that have been raised and I think are very important. I will let my statement basically speak for itself.

One of the things we have to do is keep this whole subject in the proper perspective. What we are talking about and what we are dealing with here is 1 percent of the total tuna taken by the United States annually. We are talking about 1 percent of that tuna. This is the amount of bluefin tuna that is taken off the Gulf States, and off of the East Coast States. One percent is taken within our 200-mile zone.

We have another 99 percent of that tuna that goes to consumers in this country. Of the 1 percent we are dealing with here, bluefin tuna, approximately half of that makes its way to Japan and their market. So when we are looking at this from the perspective of the consumer, we really have to weigh in our minds which is more important, the 99 percent, that is going to the consumer of the United States, or the 1 percent that is under discussion here today. No way am I trying to minimize or indicate that there should not be a concern with the health and welfare of bluefin tuna found off the coast of the United States. Unfortunately or fortunately it is a highly migratory species. There have been some discussions today that would indicate that is in doubt. I would like the scientists to speak to that, but I have never read anything in any of the literature which would indicate the bluefin tuna are not highly migratory. We have heard a great deal of discussion about a possible two-stock theory.

Now let us bring that back into perspective. Even if there are two stocks, both of those stocks are found inside and outside of our 200-mile zones. In the western Pacific alone if we are just going to isolate that particular area, those stocks face approximately 22 different nations. So you still have the same problem. If you are going to have a meaningful conservation program, you have to insure the cooperation of all countries through whose waters these stocks pass. We are just avoiding the issue if we do not look at it from that perspective. We have had some discussion about the possibility of bluefin tuna being an endangered species. I hope that has been resolved to your satisfaction. There is no evidence that bluefin tuna is an endangered species. I think all of these things are very important. A lot of times we go to these hearings—certainly this industry has experienced this with the tuna/porpoise issue over the years. I recall sitting here when everybody stood up and said we had endangered species of porpoise, and therefore the tuna industry was wearing a black hat.

Now that we have finally gotten some scientific evidence on the porpoise stocks and we just finished a hearing on that issue, we are finding that is not quite the truth. What we were talking about was some legal fiction of depletion, and I think after the hearings that we have just completed that particular issue will be resolved. A lot of times we burden the record with a number of things that are self serving, and we never really hit the real issue. If we are going to conserve, if conservation is all this committee is interested in, if that is your No. 1 goal, then you have to face the reality that this bluefin tuna is highly migratory species, and you need international cooperation. I think the problem that we all face is how do you get international cooperation?

Dr. Carlton is right. There has to be some sort of enforcement program or you are just paying lip service. You have to have some way of insuring that international cooperation.

Let me say to this committee you are never going to get that international cooperation by taking unilateral jurisdiction over resource. What the foreign fleets are going to do is the same thing that the tuna industry had to threaten with Mexico. That is stay 201 miles outside and take all of the tuna that they can. That is the only way of teaching people that you can not take unilateral jurisdiction over highly migratory species. If we recognize that bluefin are highly migratory, and we need international cooperation, we need to come up with some sort of mechanism that insures this.

Congressman Studds—I wish he was here, and I hope he gets back before we are through—made a statement that I think is very important that we address. He says when are we going to catch up with the rest of the world?

He indicates that the rest of the world has taken 200-mile jurisdiction over tunas. Now I would say for the United States to catch up with the rest of the world on this issue, we would have to slam on the brakes and start back-pedaling because nobody in the world has ever questioned our position on highly migratory species. We are right. If you are going to manage highly migratory species, it has to be done through international agreement. You look at the countries that have taken 200-mile jurisdiction over highly migratory species, and you will see the reason. It is either political or economically expedient. They are still dealing with the United States. They still want the United States to come down and harvest that fish if they do not have their own fleet. They just want them—they want us to pay a dollar. They never sit around the table and tell you that a resource is going to be in their waters 12 months out of the year. They are very honest. They think it will be there for 1 or 2 months of the year. It usually shows up and then it goes somewhere else.

The trouble is that is not conservation. That is not what the FCMA is all about. The idea that the FCMA exempts tuna, is pounded into my head every day back here. The FCMA does not exempt tuna, it treats it for what it is, a highly migratory species, and it states that international accord should govern the conservation of the resource.

I think if this committee questions nothing else during the course of this entire proceeding, it must question whether bluefin tuna is highly migratory, and is it realistic to think that we can unilaterally regulate and conserve the species?

If it is not, then we have to push forward with an international conservation program and we should be gearing our effort to strengthening ICCAT, not abolishing it.

I will say one last thing. I do not think the United States should ever be apologetic for the position it has taken on highly migratory species. Without the United States, and several other countries that have strongly opposed any effort to take unilateral jurisdiction over highly migratory species, we would never have conservation of that resource.

Thank you.

Mr. ALVERSON. My name is Frank Alverson. I am the vice president of Research for Living Marine Resources, San Diego base consulting firm, and one of our clients from time to time is the tuna industry. I am here on their behalf today. I am rather flattered by the comment here that I am the chief scientist, and I think my associate Gordon Broadhead and some others might take umbrage. I think that more correctly should just state scientist, and I would feel a little more comfortable with it.

Most of the areas that I would like to talk about have been covered, and I believe the committee has been furnished within the last month or so two documents defining highly migratory tunas, and tuna and billfish—tuna and billfish, fish without a country. Those two documents plus Public Law 94-265 form the basis for my testimony, which is only going to be in the biological area. I think we should note that item three of Public Law 94-265 states to the extent practicable an individual stock of fish will be managed as a unit throughout its range, and interrelated stock of fish shall be managed as a unit or in close coordination. That is the key item that we are talking about here today. I am not going to talk about what criteria contributed to an animal being declared highly migratory. It is all here, and we do not have to go into that or species that are involved. I do have in my statement a figure depicting distribution of both Atlantic and Pacific bluefin, and I have also sketched in this the U.S. 200 mile.

You will note that is a very small portion of the distribution of either species. If we take, as some proponents state, there are two stocks of bluefin in the Atlantic and apparently some people may say three, I believe the scientific evidence at Santander pointed out the issue is in doubt or they did not have enough to make a judgment, and with respect to even the western portion of the Atlantic bluefin stock we should know that it fronts on 22 different political entities stretching between Canada and apparently as far south as the Argentine.

Dr. Joseph and his colleagues at the Tuna Commission, the Inter-American Tropical Tuna Commission, have been engaged in management of a highly migratory species for many years—yellow fin and skipjack—and I would just like to note what they state.

The migratory nature of the tuna and billfishes makes conservation of the many species and management of the extensive fisheries on them difficult.

And we should emphasize the word "difficult."

Yet conservation is particularly important as technological advances in fishing gear and methods, coupled with evergrowing demand for tuna and billfish, continue to increase the fishing pressure on global stocks of these fish. If people all over the world are to continue to harvest tuna and billfish, effective conservation is essential. Because these fish migrate through the jurisdictions of many nations, effective conservation requires international cooperation.

In my statement I have presented a figure which shows that the bluefin are distributed continuously across the Atlantic, and at this point I would like to comment with respect to Figure 2, that that should be "1966 to 1976," not to "1968," as I see the figure states.

Furthermore, if one looks at a paper by Susan Brunenmeister on the monthly distribution of these bluefin catches, one will note that bluefin catches have been made by longline gear clear across the Atlantic in every month of the year, indicating that not all of

these fish are showing up on either the western or the eastern side of the ocean at any one time or season.

I think a decision by the United States to manage bluefin tuna unilaterally would be the equivalent of a declaration that tunas are not highly migratory and can be conserved by a single coastal state, and that they can be managed without the reliance of the best scientific evidence.

Such a declaration would result, in my opinion, in the creation of a series of national lakes with each party doing what it believes is best for its citizens when the bluefin tuna, and any other species of tuna, appears in its waters, but what cumulatively would be to the detriment of the species and stocks involved.

No matter how we define things politically, we must not try to redefine reality. Man's laws in some manner must conform to those of nature.

So if we are going to preserve the stocks, it has to be done somehow within the framework of an international body that can do it. I fully realize that ICCAT has had its critics—and it is not a perfect body; I don't think any body of that nature is ever going to be perfect. There's been a lot of discussion today with respect to do we have one stock, do we have two stocks—what is going on out there. There is a summary and discussion of technical information pertaining to the geographical discreteness of Atlantic bluefin tuna resources, and it was presented at ICCAT last year. The document numbered 79/95 was published by Susan Brunenmeister, who is with the Southeast Fisheries Center group, and she has some summaries and conclusions which I have appended as my appendix 1, and the people involved can read it at their leisure. Appendix 2 is merely a discussion of unit stock management and its concept, and this was a panel that presented the information at last year's tuna conference in California.

And I do have an appendix 3 which are some comments on the testimony of Christopher Weld, and he talks about a sudden and rapid depletion, for instance, of Atlantic bluefin and points out the collapse of fisheries in Norway, Germany, and Portugal in the early seventies. And if one looks at the actual landings which are appended to my appendix 3, table 1, apparently the German fishery really didn't exist at all in the seventies, the Norwegians had a fairly good fishery early on, and then it declined and then it bounced back. Portugal in 1978 caught about 10 times as much as it did in 1968.

Furthermore, the overall landings of bluefin in the Atlantic were about 16,000 tons in 1968 and in 1978 there were approximately 22,000 tons. The catch has gone up, it's gone down, it's been fairly stable since 1974. I don't see any indications here on the *prima facie* evidence that indicates that the Atlantic bluefin is threatened with disaster.

One more comment. There was some discussion early on about tag recoveries, 29 that were tagged in the western Atlantic and that were recovered in the eastern Atlantic. I am not sure what the source of that information is, but if one looks at this document by Brunenmeister, the figures don't quite jibe. I counted 43.

I think the important thing to remember is that this isn't really a forum to discuss recoveries, because one would have to refine the

data, tossing out first-year captures, recaptures, and things of that nature.

With reference to tags, it is interesting to note that fish tagged in the Bahamas have been caught in Norway, Brazil, New England, the Argentine, and the Gulf of Mexico, so the fish that have gone by the Bahamas have spun out and been taken everywhere.

With that I think I will conclude my statement. Thank you.

Oh, one comment. I think in the 1979 season, fishermen in the Bay of Biscay recovered bluefin tuna that had been tagged off of New Jersey, I believe, by a purse seiner. They recovered a fish that had been tagged in 1976, a fish that had been tagged in 1977, and they recovered a fish that had been tagged in 1978. It is interesting to note also that they apparently in a Spanish trap they recovered a fish that had been tagged off the western Atlantic in 1966, or thirteen years earlier. There is indication of an interchange—and the degree perhaps we don't know—but Brunenmeister's document should give everyone a better feel for it.

Thank you.

[The following was received for the record:]

TESTIMONY OF FRANKLIN G. ALVERSON, VICE PRESIDENT, LIVING MARINE RESOURCES, INC. ON BEHALF OF THE UNITED STATES TUNA FOUNDATION

My statement addressing the question posed to the Committee, "Should the FCMA be amended to include the management of bluefin tuna" will be brief and limited to the biological evidence. The members of the Committee have been furnished copies of the following two documents in the past month or so:

1. "Defining Highly Migratory Tunas" by Living Marine Resources, Inc.
2. "Tuna and Billfish Fish Without a Country" by James Joseph, Witold Klawe and Pat Murphy, Inter-American Tropical Tuna Commission.

The contents of these two documents plus Public Law 94-265, Section 301, form the basis of my testimony. Section 301, National Standards for Fishery Conservation and Management, Item 3, states: "To the extent practicable an individual stock of fish shall be managed as a unit throughout its range and inter-related stocks of fish shall be managed as a unit or in close coordination."

In the document, "Defining Highly Migratory Tunas," the questions (1) what is a tuna? (2) what is meant by "highly migratory?" and (3) are there any tunas that are not highly migratory? are examined and answered. It was determined that the most recent revision of the scombroid fishes classifies 13 species of fish as tuna. These species are placed in the tribe Thunnini—and it is members of this tribe that are considered to be tuna in the sense of the FCMA.

A species is defined as highly migratory by virtue of satisfying, at sometime during its life, four criteria:

1. It spawns outside the United States Fishery Conservation Zone (US FCZ).
2. It occurs in number outside the US FCZ.
3. It shows movements demonstrating that it may be presumed to move into and out of the US FCZ, or rarely enter the Zone.
4. It shows by movements and occurrences that the species inhabits waters more than 200 miles from any land mass, i.e., the species is truly pelagic and does at times travel in the waters of the open ocean.

The 13 species, including Atlantic bluefin, concluded to be highly migratory in the meaning of the Act, are given in Table 1.

Examination of the figures depicting the distribution of both the Atlantic and Pacific bluefin tunas defined as highly migratory in "Defining Highly Migratory Tunas" will reveal that their movements are extensive. The sketching of the 200-mile FCZ off the coast of the United States and its possessions, will illustrate the small portion of the range of each which falls within the FCZ.

As an example, that portion of the distribution of the Atlantic stock of the northern bluefin tuna within the US FCZ is very small in comparison to the total range of this stock (Figure 1). It is important to note that a minimum of 22 political entities: Antigua, Bahamas, Bermuda, Brazil, Canada, Cuba, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Martinique, Mexico, St. Kitts, St. Lucia, St. Vincent, Surinam, Venezuela and United States, front the western portion of the trans-Atlantic stock.

The paper by Dr. Joseph and his colleagues presents an excellent overview of the entire subject from the viewpoint of an organization which has considerable practical experience in managing highly migratory species, i.e., yellowfin tuna and skipjack.

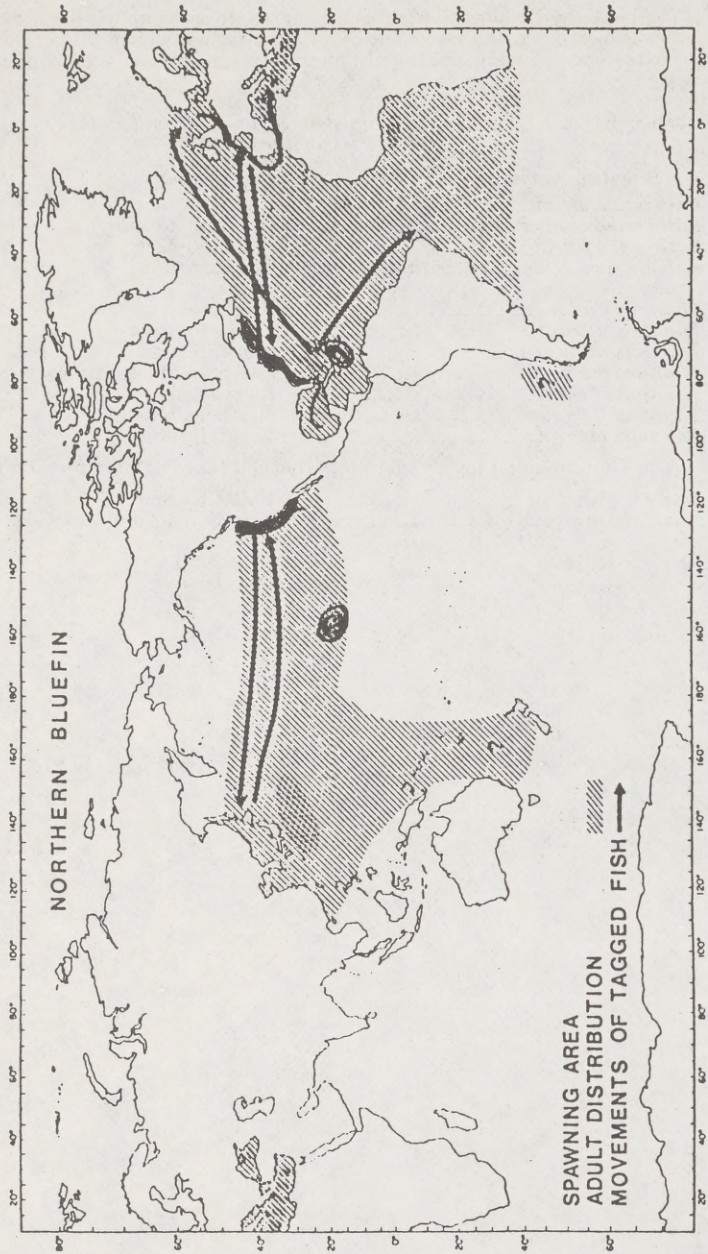
TABLE 1.—List of tuna which are defined as tuna and highly migratory in the terms of the FCMA

Scientific name	Common name
<i>Euthynnus affinis</i>	Kawakawa.
<i>Euthynnus alletteratus</i>	Little tuna (tunny).
<i>Euthynnus lineatus</i>	Black skipjack.
<i>Katsuwonus pelamis</i> or <i>Euthynnus pelamis</i> .	Skipjack tuna.
<i>Thunnus alalunga</i>	Albacore.
<i>Thunnus albacares</i>	Yellowfin tuna.
<i>Thunnus atlanticus</i>	Blackfin tuna.
<i>Thunnus maccoyii</i>	Southern bluefin tuna.
<i>Thunnus obesus</i>	Bigeye tuna.
<i>Thunnus thynnus</i>	Northern bluefin tuna.
<i>Thunnus tonggol</i>	Longtail tuna.

Also Thunnini, and highly migratory, but not listed as tuna by the FDA.

<i>Auxis rochei</i>	Bullet mackerel (tuna).
<i>Auxis thazard</i>	Frigate mackerel (tuna).

FIGURE 1
RELATION OF THE UNITED STATES FCZ TO THE
DISTRIBUTION OF THE NORTHERN BLUEFIN TUNA STOCKS



They state: "The migratory nature of the tuna and billfishes makes conservation of the many species and management of the extensive fisheries on them difficult. Yet conservation is particularly important as technological advances in fishing gear and methods, coupled with ever-growing demand for tuna and billfish, continue to increase the fishing pressure on global stocks of these fish. If people all over the world are to continue to harvest tuna and billfish, effective conservation is essential. Because these fish migrate through the jurisdictions of many nations, effective conservation requires international cooperation."

The succinct points made by Dr. Joseph, Klawe and Murphy point out why bluefin tuna should not be managed unilaterally by the United States as a "non-migratory species."

The Atlantic bluefin is distributed continuously across the Atlantic and just where one would divide the species into two discrete stocks, as some proponents advocate, is beyond me (Figure 2). A summary of technical information pertaining to the geographical discreteness of Atlantic bluefin is given in Appendix 1.

A discussion of "Management and the Unit Stock Concept" is given in Appendix 2.

In summary, the FCMA was designed to protect equally the national interest in all species of fish and shellfish whether coastal, shelf, anadromous, catadromous or highly migratory.

A decision by the United States to manage bluefin tuna unilaterally under the FCMA would be equivalent to a declaration that:

1. Tunas are not highly migratory and can be managed and conserved by a coastal state.

2. Tunas can be efficiently managed without reliance on the best scientific evidence.

FIGURE 2



Such a declaration would result in the creation of a series of national lakes with each party doing what it believes is best for its citizens when the bluefin tuna, and any other species of tuna, appears in its waters, but what cumulatively would be to the detriment of the species/stocks involved.

To classify as non-migratory, an animal which is in fact highly migratory, is simply evading the issue.

No matter how we define things politically, we must not try to redefine reality. Man's laws must conform to nature's laws.

Our primary concern should be the protection of the species/stocks involved, as well as the right of access to the resource for use by the present and future generations. The proposed amendment will do the reverse. If the object of management is to maintain a stock of fish at levels that are capable of sustaining maximum yields, such management must apply to all fisheries affecting that stock. Because bluefin tuna, and other tunas, are highly migratory, traveling through many juridical zones as well as the high seas, their proper conservation calls for management measures which apply to these stocks throughout their range.

A brief discussion of some of the points raised by Christopher H. Weld before the Subcommittee on Fisheries and Wildlife Conservation and the Environment on March 6, 1980 may be found in Appendix 3.

[APPENDIX 1]

ICCAT WORKING DOCUMENT

A Summary and Discussion of Technical Information Pertaining to the Geographical Discreteness of Atlantic Bluefin Tuna Resources

(By Susan Brunenmeister)

SUMMARY AND CONCLUSIONS

Atlantic wide marking studies show the following:

- (1) Juvenile bluefin tuna migrate to the east Atlantic from the west Atlantic and the reverse during winter months.
- (2) Large bluefin migrate from the western Atlantic to the eastern Atlantic, some of which do so during summer months.
- (3) No large fish migration from the east to the west Atlantic have been documented.
- (4) Large fish migration linking Canadian, Norwegian, Brazilian, Argentine and northeastern USA coastal areas with the Gulf of Mexico—Bahama area have occurred.
- (5) Large fish migrate from the Norwegian coast to the Iberian-Moroccan Bay during the winter and/or spring and large fish tagged in the latter area have moved into the Mediterranean during the summer.
- (6) No migrations of fish from the Mediterranean to the eastern Atlantic have been documented by tag returns although traps in the Strait of Gibraltar traditionally fish bluefin exiting the Mediterranean.

The frequency, intensity and directions of movements cannot be accurately estimated because of insufficient data. Tag loss rates, temporal geographical distributions of fishery effort and lack of releases in critical locations are data deficiencies preventing the quantitative assessment of migrations at present.

Catch per unit effort data from Atlantic wide longline fisheries shows bluefin to be distributed continuously across the Atlantic.

Morphometric studies and electrophoretic analyses of genetic variation between eastern and western Atlantic bluefin tuna resources provide no evidence to support the hypothesis of geographically separate stocks. However, with respect to the latter, estimates of exchange rates necessary to maintain genetic identity between these resources have not been made nor have the implications of age-related migrating patterns been investigated.

Studies of parasite infestation patterns have suggested that western Atlantic juvenile abundance is augmented by an annual influx of fish amounting to 15-16 percent. No comparable studies have been undertaken on small eastern Atlantic bluefin. Hence an annual exchange rate of small bluefin tuna between the eastern and western Atlantic can only be hypothesized to be 15 percent.

[APPENDIX 2]

SOUTHWEST FISHERIES CENTER, NATIONAL MARINE FISHERIES SERVICE

Proceedings of the 30th Annual Tuna Conference, August 1979

(By Gary T. Sakagawa, Chairman)

SUMMARY—PANEL DISCUSSION: MANAGEMENT AND THE UNIT STOCK CONCEPT

Frank Alverson, Moderator, Living Marine Resources, Inc., San Diego, Calif.

The concept of management of a unit stock has been with us for many years. Some examples of unit stock management on an international (multination concept) basis are as follows:

Halibut Commission—U.S. and Canada—Halibut in the North Pacific.

Salmon Commission—U.S. and Canada—Sockeye in Fraser River, etc.

Inter-American Tropical Tuna Commission—U.S., Costa Rica, Panama, Mexico, Canada, Japan, France and Nicaragua—Tropical tunas and baitfish in the eastern Pacific.

International Commission for Conservation of Atlantic Tunas—18 nations—all tunas and billfishes in the Atlantic.

North Pacific Fur Seal Convention—U.S., Canada, Japan, Russia—Fur Seal.

Some examples of unit stocks which front two or more nations—and are primarily found within the 200-mile economic zones (FCZ) are as follows: Anchovy—U.S./Mexico; Bonito—U.S./Mexico; White Sea Bass—U.S./Mexico; Yellowtail—U.S./Mexico; Mackerel—U.S./Mexico; Jack Mackerel—U.S./Mexico; Haddock—U.S./Canada; Scallops—U.S./Canada; Halibut—U.S./Canada; Salmon—U.S./Canada.

Some examples of unit stocks which front more than two nations and are found in abundance, outside 200-mile economic zones are: The billfishes; The tunas; The whales/large and small; Fur seals; Sea turtles; Oceanic sharks.

You cannot have it both ways—manage an international stock on a unilateral basis and then try to manage the same or other stocks within the 200-mile zone of other countries.

Does a country that claims unilateral management of a portion of a unit stock, when it occurs within its 200 FCZ have any right to have an impact into what other countries have to say about the presence of the same stock off/in its 200-mile zone?

James Joseph, Inter-American Tropical Tuna Commission, Scripps Institution of Oceanography, La Jolla, Calif.

If the objective of management is to maintain a stock of fish at levels that are capable of sustaining maximum yields such management must apply to all fisheries affecting that stock. Because tunas and billfishes are generally highly migratory, travelling through many juridical zones as well as on the high seas, their proper conservation calls for management measures which apply to these stocks throughout their range. Other species of fish, in addition to the tunas and billfishes, are also highly migratory. These other species must also be managed throughout their range for such management to be effective. As fisheries scientists, it is our responsibility to define the range, distribution and migrations of such stocks and to make recommendations for their management that are consistent with the biology and behavior of the fish which are the object of such management.

John Negroponte, Ocean and Fisheries Affairs, Department of State, Washington, D.C.

Negotiations between the United States and Mexico and Costa Rica for a new convention for management of eastern Pacific tunas were reviewed. The need for consideration of the unit stock management concept in the new convention was emphasized.

Harold Cary, U.S. Tuna Foundation, San Diego, Calif.

1. *The concept*

The technical aspects have been explained by Dr. Joseph. The principle is clear that tuna species are highly migratory, and defined unit stocks thereof are best managed by international agreement.

The application of the concept results in management regulations affecting tuna fishermen. I will discuss this aspect rather than the technical aspects.

2. Acceptance of international regulation

The principle can be said to be nearly universally recognized by the scientific community. It is also recognized by the governments of the producers of the majority of tuna entering into world trade. It is recognized in the U.S. through the FCMA, the Fishermen's Protective Act and our Law of the Sea position.

3. Non-acceptance by some in the United States

The FCMA fully recognizes the concept in the FCMA as it relates to tuna, but does not do so with respect to billfish, which is also highly migratory. This has caused interaction. Examples are:

The Western Pacific Fishery Management Council in 1977 proposed placing tuna under FCMA management provisions. This was a reaction to a NMFS proposal to place billfish in a category where it would be managed internationally.

The National Association for Marine Conservation this year formed the American Bluefin Committee, which proposes to put bluefin tuna under FCMA management. The genesis of this movement is the decision of sports fishing interests to move Japanese longliners outside 200 miles because of incidental hooking of billfish.

The Marine Fisheries Advisory Committee (MAFAC) this year, as its major agenda item, proposed by sports fishing interests, discussed placed tuna under 200-mile management. Discussion on the merits of such a move led to dropping the subject.

The Gulf Fisheries Management Council this year recommended placing tuna under FCMA management as a means of helping negotiate a reduction in the number of longliners. This was a proposal from sport fishing interests.

Congressman McCloskey has proposed (H.R. 3852) to bring tuna under 200-mile management. This move is opposed by Chairman Breau (Fisheries Subcommittee) and by principal environmental organization.

Thus, virtually all moves are based on the peculiar position of billfish. It is highly migratory and can best be managed internationally. Logically, it should be so managed. However, when FCMA was enacted there was no voting constituency which wanted this done and, therefore, billfish was left to FCMA management. Sports fishermen somehow consider that tuna should be similarly managed, even though their total Atlantic tuna catch in 1978 was about 70 tons out of a national total catch by commercial fishermen in all oceans of about 283,000 tons.

4. Non-acceptance internationally

The history is reasonably well known and begins with the Truman proclamations on the Continental Shelf and on Fisheries, which was followed by the 200-mile declarations of Chile, Ecuador and Peru.

Currently, as Ambassador Negroponte has reported to you, the United States is renegotiating a new Eastern Pacific Conservation Treaty 33 years after the Truman proclamations and 29 years after IATTC began its work. New principles which recognize certain rights of resource adjacent nations will most likely be incorporated into a new treaty as a consequential breakthrough. The dilemma which all resource adjacent nations face is that in the development of a consequential, non-seasonal fishery, they must fish off the coast of neighboring nations. So each have-nation also becomes a have-not nation dependent upon international cooperation.

It is not a simple case of the United States against Latin America. Anyone looking at the situation recognizes the factor of interdependence when looking at migratory species—a factor which brings us together.

5. Tuna fisheries development by the United States

Tuna is the largest U.S. food fishery in both volume and value. Tuna people have been builders in terms of fisheries development throughout the world. While some regard a distant water fishery as made up of predators, history shows that wherever U.S. tuna people have gone some progress has ensued in that area.

Without detailing the particular enterprises, I believe you will be able to see or trace the effect of U.S. tuna people in or on tuna fisheries, as well as, in some cases, other fisheries development in these nations or areas: Canada, Mexico, Costa Rica, Nicaragua, Panama, Columbia, Ecuador, Peru and Chile, Venezuela, Puerto Rico (Commonwealth), Netherlands Antilles, Spain, France, Portugal, Senegal, Sierra Leone, Ivory Coast, Ghana, South Africa, Aden (South Yemen), India, Indonesia, Philippines, South Korea, Papua New Guinea, Australia, New Zealand, American Samoa, Tahiti and the Trust Territory of the Pacific Islands.

I can give you a brief history of each should anyone ask.

6. Tuna development under a 200-mile or similarly restrictive world regime

The United States fishery reportedly began in 1903. Following World War II there was an essential rebirth of both the U.S. and Japanese fisheries as the great

majority of U.S. vessels were taken by the Navy and once island warfare and the war began to lengthen, the Japanese fleet was out of action.

Where would tuna fishery development be today if following World War II, each nation had a 200-mile limit in place, embracing migratory species as a fit subject for ownership and management?

It is clear that the development given in the preceding section would not have taken place at the intensity and rate which actually occurred. Once restriction becomes the dominant policy, it affects the planning process and investments are likely to follow the same restrictive thinking.

7. Is the unit concept dead?

The concept is not contrived. That tunas (as well as some other species) are highly migratory is an established scientific fact. That they move in, out and over national sea boundaries without regard to jurisdictional or territorial claims is also a fact. That their conservation requires international cooperation is the logical, and generally supported, conclusion.

However, apart from the science, the concept often presents multifaceted, political difficulty. Some, including some in the U.S., want to kill the concept by passing a law. Others understandably want to receive maximum benefit from the appearance of tunas in the zones which they claim. This is where we are today in treaty negotiations and new ground may be broken.

To answer the Chairman's question, the concept is not dead—it gets bent out of shape on occasion.

8. Uses of scientific information

Chairman Sakagawa asks the panelists to comment on uses of scientific information. This is a consideration of growing importance in making investment decisions once a fishery reaches reasonable maturity.

As a very young man, I can remember tuna fishermen discussing whether or not the tuna resources would hold up—this was back in the middle 1930's. The fishery had been developed from California to the Galapagos by that time. It was not until 1951 that the fishery reached the area off northern Peru as the fishery and then the fleet expanded.

The IATTC was born in 1949. It is a matter of importance to note that we know of no other major fishery where resource studies were begun long before there was a research problem. It was not until 1966 that the first quota on yellowfin was agreed upon for the area known as the CYRA. In the thirteen years since, the quota has often been increased—never decreased—as scientists enlarged their understanding and assessment of the population. The quota in 1966 was 79,300 tons of yellowfin and has reached as high as 210,000 tons on an optional basis since.

The scientific information became more useful as investments grew and financial institutions wanted more assessments of the resource.

The scientific information on tuna has not succeeded in developing a fishery. The judgements reached by the Tuna Commission, with respect to quotas and seasons, however, forced the extension of the fishery westward beyond the CYRA once the season closed, eastward as far as the coast of West Africa and southward to the Pacific islands.

Quota levels have risen. Dr. Joseph has given this history. I can recall when a decision was made to raise the quota to 140,000 tons of yellowfin annually for three years. The fishermen were warned that this could test and possibly adversely affect the resource. These men who are by nature more optimistic than scientists (who are essentially over cautious) decided that it was their future that was at stake and decided there was at least that much tuna available without damaging the stock. The testing of the numbers began at that level. There was no problem as a result and later annual quotas were increased.

So, between a group of able scientists and fully competent fishermen, this testing of numbers took place. There is only so much that can be calculated before proof is required. Testing numbers is important in any ocean. There are at least two results that can be expected: it keeps the spirit of enterprise and hope for increased results alive, and it lessens the possibly tyranny of the formally educated.

[APPENDIX 3]

COMMENTS ON THE TESTIMONY OF CHRISTOPHER H. WELD

Mr. Weld states: "The sudden, rapid and alarming depletion of Atlantic bluefin tuna populations signaled by the collapse of the fisheries in Norway, Germany, and Portugal in the early 1970's was the catalytic event that led to the founding of the National Coalition."

Fact: In 1968, the landings of Atlantic bluefin tuna by the flag vessels of all nations fishing this species totaled 16,153 metric tons. In 1978, the landings totaled 21,976 metric tons (Table 1).

The German Federal Republic has caught an insignificant quantity of bluefin over the period 1968-78. If there was a collapse in the landings it was prior to 1968 (Table 1).

Landings in Norway declined in the early 1970's and rose in the late 1970's. In 1978, Portugal landings totaled ten times those of 1968.

Overall landings declined somewhat in the early 1970's to about 14,000 metric tons in 1972 and four years later, were twice that, i.e., nearly 27,700 metric tons.

Given the highly migratory nature of bluefin and oceanographic regimes which differ from time to time and place to place, I know of no biological law which states bluefin must be found at the same location, in the same abundance, every year.

Mr. Weld: "It is our belief that the International Convention for the Conservation of Atlantic Tunas (ICCAT) has failed to stop member nations from continuing to overexploit Atlantic bluefin tuna populations on both sides of the Atlantic Ocean."

Fact: The catch in 1978 was above that of 1968. Our only hope for preservation of the stocks is through international cooperation, not unilateral action. ICCAT may not be the perfect organization, but it is the best vehicle we have to manage on a unit stock basis.

Mr. Weld: "Moreover, we believe that in the foreseeable future ICCAT is unlikely to take meaningful action to prevent continued depletion of tuna stocks."

Fact: There is no indication that any Atlantic tuna stock, yellowfin, skipjack, bigeye, bluefin, etc. is being depleted.

Mr. Weld: "France and Spain and the so-called Francophone nations of Africa's West Coast, including Senegal and the Ivory Coast, have over the years evinced a disinclination to limit the removals of tunas from major eastern Atlantic fisheries."

Fact: In 1968, the combined catches of bluefin by France and Spain totaled 5,431 metric tons and in 1978 they totaled 5,949 tons. This is hardly evidence that these countries have evinced a disinclination to limit removal of tunas. It should be noted that the French/Spanish catch in 1968 comprised 33.6 percent of the total Atlantic bluefin catch, whereas in 1978 it was 27.1 percent.

Mr. Weld: "A growing number of experts subscribe to the theory that stocks in the western Atlantic are separate from stocks in the eastern Atlantic and that, although there is a degree of intermixing evidenced by the occasional return of U.S. tags from fish caught in the eastern Atlantic, such intermixing is irregular and relatively insignificant. The western stock, they believe, is sufficiently discreet (sic) to be treated as a single, separate management unit."

At the meeting of the Advisory Committee to the United States Section of ICCAT, Washington, D.C., October 30-31, 1979, the decision by consensus of the Advisory Committee was that the two-stock management plan should not be supported. Statements at the meeting were as follows:

NMFS scientists

Dr. William Richards:

1. Ecto-parasitic studies indicate one Atlantic stock.
2. Nematodes found in nasal passages of 85 percent of western Atlantic fish. These parasites are from tropical waters. About ten percent of Bay of Biscay bluefin had the same parasites, indicating their western Atlantic origin.
3. Bluefin in western Atlantic lacking these parasites are of eastern Atlantic origin.
4. Copepods are found in fish originating in the eastern Atlantic and these are found in the western Atlantic.
5. A contract has been made with Dr. John Calaprice of IATTC for fin spine crystallography. If this technique is found useful, it can be determined where the fish lived—based on analysis of layers.

Dr. Michale Parrack:

1. Enzyme studies show no basis for separate stocks at this time.
2. Parasitic studies show interchange.
3. Morphometric studies do not indicate that stocks can be identified by body measurements.
4. Chart from Japanese longline logs (shown) on year to year basis, 1966-1968, shows bluefin distribution to be continuous across the Atlantic.
5. There are separate spawnings in the Mediterranean and Gulf of Mexico-Caribbean.

Dr. William Fox: 1: There could be some gain by managing separate stocks—must have guaranteed eastern management.

Advisors

Anthony Nizetich: 1. Two-stock management means less cooperation. We should not recommend two-stock management.

Christopher Weld: 1. We have two options: Two-stock management, or no two-stock management.

Henry Lyman: 1. I would not push for the two-stock theory. I do not object to it.

David Fyrberg: 1. Do not push two-stock management.

John Mulligan: 1. Should not have two-stock management.

Eugene Fidell: 1. The premature imposition of regional or two-stock management is dangerous. Radical initiatives are not called for.

Jack Stokes: 1. The data does not support a two-stock theory. To maintain ICCAT's position, do not put tuna under FCMA. A two-stock theory will lead to abandonment of ICCAT.

Gordon Broadhead: 1. The concensus is that a two-stock theory should not be supported.

Commissioners

Frank Carlton: 1. The significance of the two-stock theory dims. I have switched from, dropped the theory.

Harold Cary: 1. The fatal defect in the two-stock theory is that it will lead to separation and abandonment. Scientists from one side can say we will take care of our territory—you take care of yours. We will get together from time to time.

Mr. Weld: "Depletion of the species is most noticable among the giant bluefins."

Fact: In recent years, the United States Government has increased the allowable take of giant bluefin.

Mr. Weld: "Because of the exemption of so-called highly migratory species (meaning tuna) provided by Section 103 of the Fishery Conservation and Management Act, foreign vessels fishing for tunas inside the 200-mile limit are not subject to U.S. regulation."

Fact: True-highly migratory species are managed on the unit stock basis by multinational bodies. This is accordance with Public Law 94-265, Section 301 National Standards for Fishery Conservation and Management (see above, item 3). Dr. James Joseph, Director of Investigations for the Inter-American Tropical Tuna Commission, states as follows: "If the objective of management is to maintain a stock of fish at levels tht are capable of sustaining maximum yields such management must apply to all fisheries affecting that stock. Because tunas and billfishes are generally highly migratory, traveling through many juridical zones as well as on the high seas, their proper conservations calls for management measures which apply to those stocks throughout their range. Other species of fish, in addition to the tunas and bill fishes, are also highly migratory, these other species must also be managed throughtout their range for such management to be effective. As fisheries scientists, it is our responsibility to define the range, distribution and migrations of such stocks and to make recommendations for their management that are consistent with the biology and behavior of the fish which are the object of such management."

TABLE 1.—SOME STATISTICS ON ATLANTIC BLUEFIN LANDINGS

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Atlantic/Mediterranean	16,153	16,285	14,348	15,559	14,074	14,347	22,399	26,262	27,675	25,679	21,976
Atlantic	7,904	8,114	10,931	10,619	8,651	8,733	9,709	15,127	11,673	13,838	14,239
Mediterranean	8,249	8,171	3,417	4,940	5,423	5,614	12,690	11,135	16,002	11,841	7,737
German, F.R.	0	0	0	0	0	0	0	0	84	0	1
Norway	900	900	263	568	430	420	864	988	529	764	233
Portugal	1,300	1,500	207	85	0	21	1	321	628	233	3,213
France	1,200	1,400	470	653	430	421	865	1,309	1,157	997	3,447
Spain	3,100	2,100	1,832	2,880	1,840	1,951	2,322	2,492	4,067	3,774	2,289
Italy	2,331	3,421	3,692	3,040	3,445	3,280	1,840	2,550	2,105	2,977	3,660
Senegal/Ivory Coast	5,431	5,521	5,524	5,920	5,285	5,231	4,162	5,042	6,172	6,751	5,949
Italy	0	0	0	0	0	0	0	0	0	0	0
Italy	2,800	3,100	1,177	1,246	3,467	3,017	7,574	7,483	10,072	6,617	4,858

¹ Includes small quantity of other.

Source: IGCAT Statistical Bulletin, vol. 9, 1978 published 1979—1968-69. Proceedings of the Sixth Regular Meeting of the Commission 1970-78.

The CHAIRMAN. Mr. Edney?

Mr. SOMERS. Mr. Chairman, members of the committee, my name is Frederick Somers. I am a legislative representative of the Seafarers International Union. I am appearing today to present a brief statement on behalf of Steve Edney, president of the United Cannery and Industrial Workers of the Pacific. Mr. Edney regrets that he could not be here today to present his views personally.

The United Cannery and Industrial Workers of the Pacific is an affiliate of the Seafarers International Union of North America, and represents approximately 10,000 workers in tunafish canneries in California, Puerto Rico, and American Samoa.

The United Cannery and Industrial Workers of the Pacific is opposed to the proposal, to the ICCAT authorizing legislation, which would place Atlantic bluefin tuna under unilateral U.S. management within its 200-mile zone.

Such an action by the United States would threaten the jobs of thousands of cannery workers by setting off a chain reaction in other nations that have entered into constructive agreements for the protection of the species. There must not be a weakening of these cooperative efforts on the part of our Nation and others.

The United States is a world leader in both the conservation and consumption of tuna. If this Nation adopts the principle of unilateral management of highly migratory species, then others would be encouraged to follow this example, thereby undercutting existing and possible future agreements.

The tunafish canning industry has developed to the point of being our Nation's leading food fish industry, employing thousands of workers in one of the few labor-intensive industries remaining in this country.

We ask the committee to seriously consider the adverse impact this unilateral action would have on our industry, and urge that any amendment to that end be rejected.

Thank you, Mr. Chairman, that concludes my presentation of Mr. Edney's statement.

[The following was received for the record:]

STATEMENT OF STEVE EDNEY, PRESIDENT, THE UNITED CANNERY & INDUSTRIAL WORKERS OF THE PACIFIC, SIU, AFL-CIO

My name is Steve Edney, our Union represents about 10,000 workers in tunafish canneries in California, Puerto Rico and American Samoa.

We are opposed to the proposed amendment to the ICCAT appropriation bill which would place Atlantic bluefin tuna under unilateral United States management within its 200-mile zone.

Such a move by the United States would threaten jobs of thousands of cannery workers by setting off a chain reaction in other nations that have made constructive agreements which would protect the species. There must not be a weakening of these cooperative efforts on the part of our nation and others.

The United States is a world leader in both the conservation and consumption of tuna. If this nation adopts the principle of unilateral management of highly migratory species then others would be encouraged to follow thereby undercutting existing and possible future agreements.

We ask this committee to earnestly consider our problem and weigh the consequence of such unilateral action mentioned herein. We ask that the amendment be rejected.

Tunafish canning has developed to the point of being our country's leading food fish industry, employing thousands of employees in one of the few labor intensive industries left in this country.

The CHAIRMAN. Mr. Felando?

Mr. FELANDO. Thank you, Mr. Chairman, I am August Felando, president of the American Tunaboat Association. To my right is George Sousa. George is the chairman of the board of directors of the American Tunaboat Association, and he has fished not only in the Atlantic but also the Pacific. His main fishery is in the Pacific, but he is prepared to answer some questions about the Atlantic fishery as well.

I have a very long statement, and I will try to summarize it for the purpose of just commenting on some specific points.

One, our members have a tremendous investment in their vessels. These vessels are built to operate for many years for the purpose of paying out that investment. Without the tunas available to them, they will not be able to pay out that investment.

As Mr. Carey said, we were the leaders—and I mean not just the tuna fishermen owners, but all segments of the industry supported the move for getting the scientific evidence, setting up the structure so that somebody could push the yellow light or the red light as to when the fishery was being overfished in the Pacific.

Now, since 1966, the U.S. fleet in the Pacific has been regulated with respect to the catch of yellowfin. Since 1961, I have been a member of the advisory committee to the Pacific Tuna Commission, and since 1969 I have also been a member of the advisory committee to the Atlantic Tuna Commission.

Based on our success, at least in our view, the success of the Pacific Tuna Commission—and sometimes we disagreed with the scientists and we had some problems, claiming over-regulation, claiming inequity, that we were carrying the burden of conservation and that the foreigners were not, the same arguments that were expressed today—but nevertheless we supported the creation of the Atlantic Tuna Commission, we have supported the regulation recommendations not only on Atlantic bluefin, but also the yellowfin, the skipjack, and the bigeye.

In effect, as a result of the regulation on the Atlantic bluefin that came into force in 1975 when the Atlantic Tuna Conventions Act was enacted by Congress—in effect, our fishermen have been excluded now from the Atlantic bluefin fishery. From 1937 to 1941 tuna purse seine vessels from California made the trip to the east coast for the purpose of exploring the possibility of developing a purse seine bluefin fishery. This was before World War II. After World War II another exploration was made, again by the purse seine vessel the *Western Explorer* to the east coast, for the purpose of developing a bluefin fishery off the east coast.

We had problems in the fifties with the Japanese, and you can say damaging our fishery to a great extent—a lot of our people were almost going broke in San Diego as a result of the Japanese competition.

The CHAIRMAN. In the Atlantic?

Mr. FELANDO. In the Pacific, in 1950. As a result of the conversion from bait boats to purse seiners, the third trip to the east coast occurred in the early sixties, and reference was made to that. So we are not strangers; we feel that we have an historical connection with the development of the commercial bluefin fishery in the Atlantic with respect to the purse seine fishery.

Nevertheless, right now, because of the very small quota on the purse seine fishery, and the most recent proposed regulations at least tell us that for some reason the National Marine Fisheries Service now is starting to phase out the purse seine fishery on bluefin, on school bluefin—and this, incidentally, is the only type of bluefin that can go in the can. When you get giant bluefin, they look like this mahogany table, the consumer will not take that tuna in the can, and so in effect we don't fish for the giant bluefin; we can only fish for school bluefin because of the color factor involved in bluefin. In effect, our vessels, therefore, have been excluded, we think, from the bluefin fishery.

So we are not strangers to regulation—and that is my point; we are not strangers to the Atlantic bluefin fishery. We think to a great extent what has happened here in the Atlantic has been a certain degree of over-regulation. There is no question that there is an upper limit to the amount of bluefin available in the Atlantic.

We have had a bluefin fishery in California since 1916, and it's still going on as a successful fishery. The Mexicans fish it, we fish it, so do the Japanese, because the fish off California travel to Japan, and vice versa.

This proposed bill should not be characterized as a local issue, one attempting to solve the problems of people off the east coast. We are also in the Atlantic. We are fishing for the yellowfin and the skipjack—that's the primary production of U.S.-flag vessels in the Atlantic.

We honestly feel, and I sincerely suggest this to the members of the committee, that the proposed Studds bill will not only be damaging to the conservation and management of the bluefin fishery, but it will also be damaging to the U.S. fishermen in time, because the U.S. Government, in order to preserve the bluefin fishery, will recognize the fact that as others take bluefin outside the FCZ, something will have to be done, someone will have to make the sacrifice to maintain the giant bluefin or the bluefin fishery. And as a result of taking unilateral action, not only will we endanger the resource, because you cannot attempt to manage a portion of the total habitat or a portion of the fish and achieve success, but I honestly believe that all fishermen, including the U.S. consumer, will be damaged in time by this proposal.

We aren't pleased with everything in ICCAT; we aren't pleased with everything in the Pacific Tuna Commission. But you have to work at it; we have to rely on the basic strength of the U.S. position, and that is science is with us—it is not against us. And why is it with us? That is because of the biological characteristics of the tuna.

And just as the tuna are highly migratory, there is one fact that you cannot ignore: so are the fishermen. They have to be as mobile and as migratory as the fish itself.

We recognize and sympathize with the difficulties of the Atlantic tuna fishermen. We think that something can be done in the proper forum, not changing the law, but working with ICCAT, working with the protections and the leverages that are available in the Atlantic Tuna Conventions Act, which we supported strongly. I am not going to go into all the details about comparing numbers about what percentage of bluefin is caught in the Pacific,

what percentage is caught in the Atlantic—we'd like to see more development of the tuna fishery, whether it's us or whether it's the people who live on the Atlantic or the gulf—and we hope that will happen.

And I won't go into it—I think the statement speaks for itself—about the economic impact factors that are involved in the tuna fishery.

I just think there is a better way of doing it than is proposed by Congressman Studts, because the damage to us, the damage to the interest in maintaining a highly productive U.S. tuna fleet is not only relevant to providing tuna to the U.S. consumer and to keeping a strong U.S.-flag fishing fleet, but by being productive the United States has a strong voice, an effective voice, in those forums in which conservation can only be achieved. If you don't produce, if you only consume, you are not going to have much to say about the conservation and management of tuna.

And so it affects not only our interests, but it also affects the national interest in this respect. As long as we are an effective producer in the Atlantic or the Pacific or wherever the tunas are, the U.S. Government will have a more effective voice with respect to recommending those conservation measures that would make the tuna available not only for us, the tuna fleet, but also the consumer.

I would be happy to answer any of your questions as to the relationship of the FCMA, that provide us protections with respect to negotiations with foreign countries, and the relationship of the FCMA to the Fishermen's Protective Act—that, frankly, if we don't have those two protections that now exist in the FCMA and the FPA, we think, and we can establish to anyone's satisfaction, that we just can't see how you are ever going to have an effective U.S. distant water tuna fishery.

Thank you.

[The following was received for the record:]

STATEMENT OF AUGUST FELANDO, PRESIDENT, AMERICAN TUNABOAT ASSOCIATION

INTRODUCTION

I am August Felando, President of the American Tunaboat Association (ATA). I have been employed to manage the ATA since November 1, 1960.

The ATA is a non-profit fishery cooperative corporation formed without shares of stock under the provisions of the Fish Marketing Act of the State of California. Its principal office and place of business is at One Tuna Lane, San Diego, California, 92101.

The membership of the ATA includes persons who own and manage 92 commercial tuna fishing vessels documented under the laws of the United States. As of December 31, 1979, there were 154 U.S. flag bait boats and purse seiners employed in the tropical tuna fisheries. Of this total, 30 vessels with an aggregate fish carrying capacity of 2,544 short tons were bait boats, the remaining 124 vessels with an aggregate fish carrying capacity of 112,436 tons were purse seiners.

In 1979, about 514 million pounds of tuna and tuna-like fish from U.S. flag vessels were landed, valued ex-vessel at about \$216 million. Over 90% of such landings came from U.S. flag tuna purse seiners.

Canned tuna products for human and animal consumption processed in the United States in 1979 were valued wholesale at about \$1.2 billion. Imports of tuna and tuna-like products for 1979 came to about \$387 million.

Based upon the annual per capita consumption of canned tuna in the United States, we estimate that the ATA annually supplies enough tuna for about 65 million U.S. consumers.

STATEMENT IN OPPOSITION TO THE STUDDS AMENDMENT

The Studds Amendment proposes to make one stock of tuna, the Atlantic Bluefin, subject to the exclusive fishery management authority of the United States.

This proposal cannot be characterized as an amendment to the FCMA that is solely applicable to a "local" fishery problem unique to the Bluefin fishery of the East Coast and Gulf States. The Studds Amendment to H.R. 6310 represents an attack on the basic principle which the United States has followed in the conservation and management of highly migratory tunas, namely that the tunas must be under the control of an international body which has jurisdiction over the entire range of the species or stocks. It is a scientific fact that the United States cannot implement exclusive fishery management authority over the entire range of the Atlantic Bluefin stock of its fishery.

In our opinion, the correct characterization of the Studds Amendment is that it causes an abandonment, if not an indefensible contradiction, of a juridical position and policy concerning the conservation and management of the tunas that has been successfully developed, maintained and scientifically asserted by our government for over 30 years. Such change in position and policy would destroy the most productive segment of the U.S. Tuna Fleet, resulting in substantial adverse socio-economic impacts on thousands of persons directly and indirectly associated with the U.S. Tuna Industry as well as the U.S. consumer.

REASONS IN OPPOSITION TO THE STUDDS AMENDMENT

1. The Studds amendment will adversely impact the Atlantic Bluefin stock and the fisheries conducted by U.S. commercial and recreational fishermen

This is because U.S. conservation measures will only apply to the Fishery Conservation Zone (FCZ) of the United States and not over the entire range of the Atlantic Bluefin stock or its international fishery. The unique biological characteristics and behavior of the Atlantic Bluefin as well as the mobility of the international tuna fleet would make the U.S. task impossible to perform.

What distinguishes the tunas and tuna-like fish from other species is their migratory behavior. This is particularly true for the Atlantic Bluefin. The Pacific Bluefin make transoceanic migrations. The Bluefin found in the Southern hemisphere migrate throughout the Atlantic, Pacific and Indian oceans. The Bluefin in the Atlantic found above the equator make extensive and swift migrations from continent to continent. With their unique body configuration, the tunas are able to cover great distances rapidly. Biologically, they must move continuously in order to extract a sufficient supply of oxygen from sea water for survival. Tunas never rest, they are constantly on the move seeking food for the energy they need to survive. This highly migratory nature of the tunas depends, therefore, on a variety of environmental conditions. Necessarily, as ocean conditions for feed and water temperature change, catch distributions off coastal countries will vary greatly from season to season.

The needs for fishermen's gear and vessels to be as flexible and mobile as the tunas has caused the world's tuna fleets to also take on characteristics of an international nature. For instance, a tuna vessel may fish in the coastal waters of 5 or 6 nations during a single voyage, or fish in the Atlantic, Pacific and Indian oceans in a single year. Vessels also fish successfully beyond 200 mile zones during an entire year or for many voyages during a year. In the international tuna fishery today, the continuing trend is towards the development of vessels and gear that take advantage of as many migratory behavior characteristics of the tunas as possible.

The longline fleets in the Atlantic illustrate how they can track the Atlantic Bluefin, following them off the coast of one continent to areas off the coast of another, from grounds in the Mediterranean Sea to those in the Caribbean Sea. They are able to do this successfully, in my opinion, because they are familiar with the critical environmental conditions that affect the migratory behavior patterns of the Bluefin.

In view of the fact that the United States cannot control the environmental conditions that affect the migratory behavior of the Atlantic Bluefin, or the international fisheries that can be conducted beyond the FCZ of the United States, it is clear that any regulatory measures implemented by the United States unilaterally under the Studds Amendment would be ineffective and inadequate.

It is axiomatic that conservation measures applicable to Atlantic Bluefin and its fishery cannot be applied effectively over a portion of its migratory range, because what happens in another portion of its range will affect the entire stock. On a related point, the recent report of the scientific arm of the International Commission for the Conservation of the Atlantic Tunas (ICCAT) is relevant and instructive

on the issue of managing two stocks Atlantic Bluefin—assuming that two stocks of Atlantic Stocks exist: The Committee pointed out that: "(iii) Failure to manage the stock on either side of the Atlantic could have serious repercussions on the other." Page 64, Part II, Proceedings of 6th Regular Meeting of ICCAT.

Besides the difficulty of applying conservation measures throughout the range of the Bluefin stocks—either one stock for the entire Atlantic or one stock in the Western Atlantic—how will the United States collect the necessary statistical and biological data required assessing trends in the fish and the fisheries for making a proper analysis regarding levels of harvest?

The Atlantic Bluefin is only a seasonal visitor to the FCZ, and the FCZ represents a very small portion of the total habitat known to be in the migratory range of the Atlantic Bluefin. In view of this fact, how will the United States undertake its duties under the FCMA to determine the optimum yield (OY) or the maximum sustainable yield (MSY) of the Atlantic Bluefin?

We believe that the Studs Amendment will not benefit the U.S. fisheries for Atlantic Bluefin, because the United States will be unable to effectively conserve and manage the Atlantic Bluefin. The United States will be unable to collect the necessary statistical and biological data throughout the entire fishery and over the entire stock of Bluefin under exploitation. Nor will the United States be able to apply effective conservation and management measures, because they will only apply within the FCZ and not over the entire range of the Bluefin resource.

A failure to effectively manage the Atlantic Bluefin fishery will have long-term adverse impacts on the production of Atlantic Bluefin by both U.S. commercial and recreational fishermen. The United States would be forced to regulate its fishermen more strictly each year of the fishery, asking them to harvest less in order to prevent severe depletion. The tunas would not suffer extinction, but those U.S. fisheries dependent upon a reasonable volume of catch to offset costs of capture would suffer and gradually wither away economically. Under these circumstances, the commercial tuna fishermen—persons dependent upon significant annual catches of Atlantic Bluefin to survive economically—would be the real victims. So also, the U.S. consumer of Atlantic Bluefin tuna.

Although our members have not engaged in the Atlantic Bluefin Fishery in the past few years, the history of the purse seine fishery for tuna in New England involves the tuna fishermen from the ports of San Pedro and San Diego, California. The purse seine fishery for Atlantic Bluefin was first attempted in 1937-1941. After World War II, a second try by West Coast fishermen was made in 1951. (Please see: "Commercial Fisheries Review," March 1952, Vol. 14, No. 3, pp. 1-19.) In the early 1960's, West Coast purse seine fishermen again developed the purse seine fishery for Atlantic Bluefin and Skipjack off the East Coast states. Today, we are distressed to note that the present regulatory regime offered by the NMFS for 1980 appears to be designed to phase out the purse seine fishery for school tuna. While our fishery in the Atlantic is on the tropical tunas (Yellowfin, Skipjack and Bigeye tunas), we remain very much interested and concerned about the future of the U.S. commercial fishery on Atlantic Bluefin. Besides the historical connection with the New England Bluefin Fishery, the Pacific Bluefin Fishery for tuna purse seiners was historic origin for the U.S. Bluefin Fishery, first commenced in 1916. Thus, we perceive a direct connection between the Studs Amendment on Atlantic Bluefin and the original Bluefin Fishery of this nation, namely the Pacific Fishery. We believe that it is impossible to separate the two Bluefin Fisheries, therefore, the Studs Amendment concerning Atlantic Bluefin will also directly impact the Pacific Bluefin Fishery. Such impact will be adverse and destructive.

STATISTICAL MEASURES ON THE UNITED STATES BLUEFIN CATCH

During the period 1971-1979, the average annual landings of Bluefin tuna by U.S. fishermen represented 4 percent of the total U.S. tuna catch.

Only 28 percent of such catch of Bluefin, on the average, was caught off U.S. shores; only 21 percent of such catch of Bluefin, on the average, was caught off the East and Gulf States; such catch of Bluefin caught off the East and Gulf States represents 1 percent of the total U.S. catch of tuna. Source: Current Fisheries Statistics, "Fisheries of the United States," during years 1971-1979, U.S. Department of Commerce, NOAA/NMFS.

2. We strongly and sincerely believe that the impact of the Studs Amendment cannot be restricted to only one stock of tuna; it will be perceived by interested foreign citizens and foreign governments as an abandonment of the "highly migratory species doctrine" by the government of the United States. Necessarily, we see the Studs Amendment placing in high jeopardy the livelihood of U.S. citizens engaged in the Pacific Bluefin Fishery, the Pacific Albacore Fishery, and the very important Tropical Tuna Fisheries.

We believe our perceptions to be correct. Necessarily, this Committee must examine the benefits, the losses, and trade-offs involved in having the United States exercise exclusive fishery management authority over all tuna. Some areas requiring careful and complete examination are the following:

- (1) Socio-economic impact on the U.S. Tuna Industry, the fisheries of the United States, the states and possessions having tuna fisheries, and on the U.S. consumer;
- (2) Impact on the "leadership role" of the U.S. government on existing international tuna fishery conservation and management regimes (IATTC and ICCAT);
- (3) Impact on the ability of the U.S. government to negotiate international fishery agreements on access issues affecting the U.S. Tuna Fisheries beyond the FCZ and within fishing zones within the control of other coastal nations; and
- (4) Impact on existing treaties, statutes affecting the U.S. Tuna Fishery, and on the positions taken by the U.S. government in the U.N. Third Conference on the Law of the Sea (UNCLOS).

IMPACT FACTORS

1. In general

The Japanese and U.S. Tuna Fleets catch about 52 percent of the world's production of tuna. Together, Japan and the USA use about 75 percent of the world's tuna production.

Over 75 percent of the world's tuna catch is accounted for when the production of the tuna fleets from South Korea, Taiwan, Spain and France are included with that of Japan and the USA. Over 65 countries harvest tuna. Other countries having significant tuna fleet landings are the Philippines, Mexico, Ecuador, Venezuela and Panama.

2. U.S. tuna fishery and other fisheries of the United States, 1971-79

- a. Tuna represents 10 percent of the U.S. catch in volume and 13 percent in value.
- b. Percentage of total U.S. landings of tuna/bonito taken off U.S. shores: 1972, 14.5; 1974, 13.3; 1976, 6.9; 1978, 9.3; and 1979, 6.2.
- c. Tunas other than "albacore or white meat tuna" account for over 93 percent of all domestic landings. These "light meat" tunas are the Yellowfin, Skipjack, Bluefin and Bigeye. About 87 percent of such production is represented by the Yellowfin and Skipjack tunas.
- d. Percentage of total U.S. tuna landings represented by the "light meat" tunas (Yellowfin, Skipjack, Bluefin, Bigeye): 1972, 88.9; 1974, 90.7; 1976, 93.6; 1978, 93.4; and 1979, 97.0.
- e. Percentage of total U.S. landings of "light meat" tunas caught off U.S. shores: 1972, 4.1; 1974, 2.4; 1976, 2.7; 1978, 3.2; and 1979, 2.7.

3. Access to fishing grounds, impact on U.S. tuna fleet dependent upon "light meat" tuna production

The major impact of a change in the U.S. position on "highly migratory species" would relate to access to fishing grounds located within 200 miles of foreign coasts. Since on the average over 97 percent of the U.S. "light meat" tuna production is taken in waters off foreign shores, that part of the U.S. Tuna Fleet dependent upon such production would be adversely affected. Since "light meat" tuna production represents an average of over 92 percent of the entire tuna catch of the U.S. Fleet, the virtual economical existence of the U.S. Tuna Fleet is affected by the "access" problem.

The primary fishing grounds available to that part of the U.S. Tuna Fleet dependent upon "light meat" tuna production is located in the Eastern Tropical Pacific Ocean, east of 150 degrees longitude. In recent years (1971-1978), about 87 percent of the "light meat" tunas have been caught within a regulatory area designated by the Inter-American Tropical Tuna Commission (IATTC), called the Commission Yellowfin Regulatory Area (CYRA). The total area of the CYRA is slightly over five million square miles, with 42 percent of the CYRA within 200 miles of the coastal nations. During 1971-78, about 72 percent of all Yellowfin and Skipjack landed from the CYRA has been caught within 200 miles of coasts and islands of foreign countries bordering the CYRA. See Chart A.

A secondary fishing area for such U.S. Tuna Fleet is the Atlantic and Caribbean Sea, particularly off West Africa. Almost all of the fishing takes place within 200 miles of islands and coasts of foreign countries. The vessels generally fish in the area from June to November.

A third area, presently being explored and developed by such U.S. Tuna Fleet is located in the Central and Western Pacific, particularly off New Zealand and in areas covered by lines from Guam to Palau to Papua New Guinea to American Samoa to Hawaii to Midway and to Northern Mariannas. As the attached map

indicates, the area is uniquely covered by 200 mile zones, about nine million square miles of ocean, just by the countries in the South Pacific.

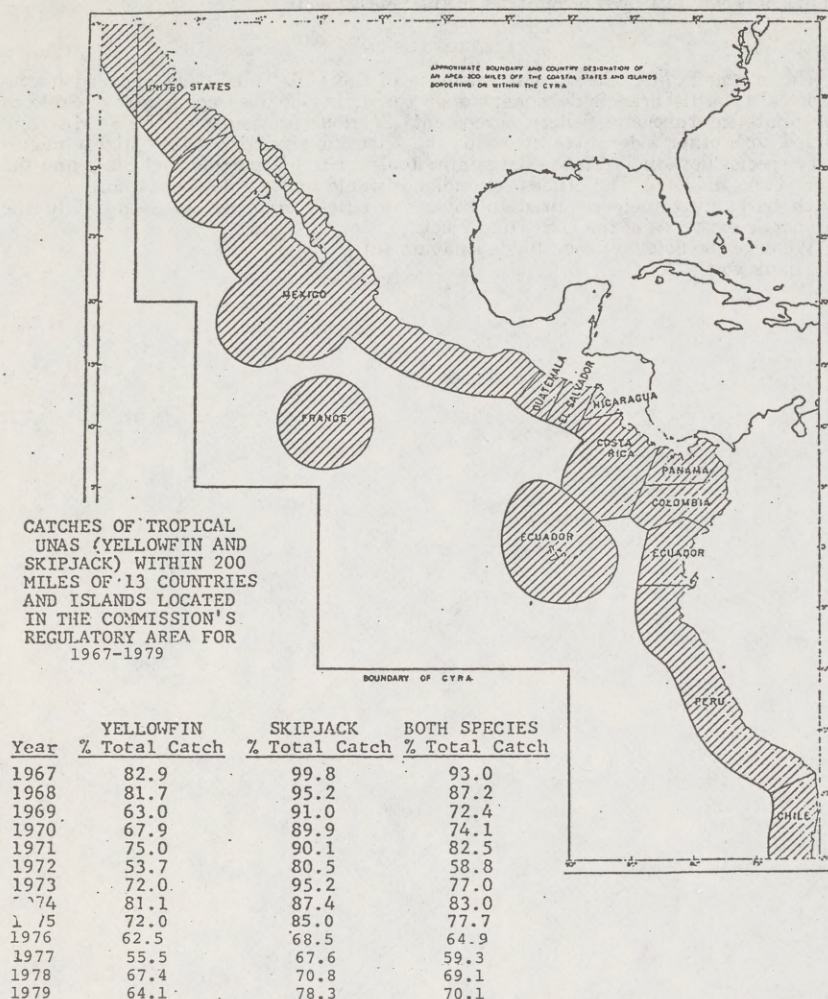
CONCLUSION

Under the FCMA, the virtual existence of the U.S. Tuna Fleet engaged in the tropical tuna fisheries is dependent upon the ability of the Department of State to negotiate international fishery agreements. Various provisions of the FCMA combined with other federal statutes plus the scientific strength of the "highly migratory species doctrine" provide bargaining tools for the Department of State and the U.S. Tuna Industry. The Studds Amendment would undermine if not totally destroy such bargaining tools required to solve the access problems so essential to the economic existence of the U.S. Tuna Fleet.

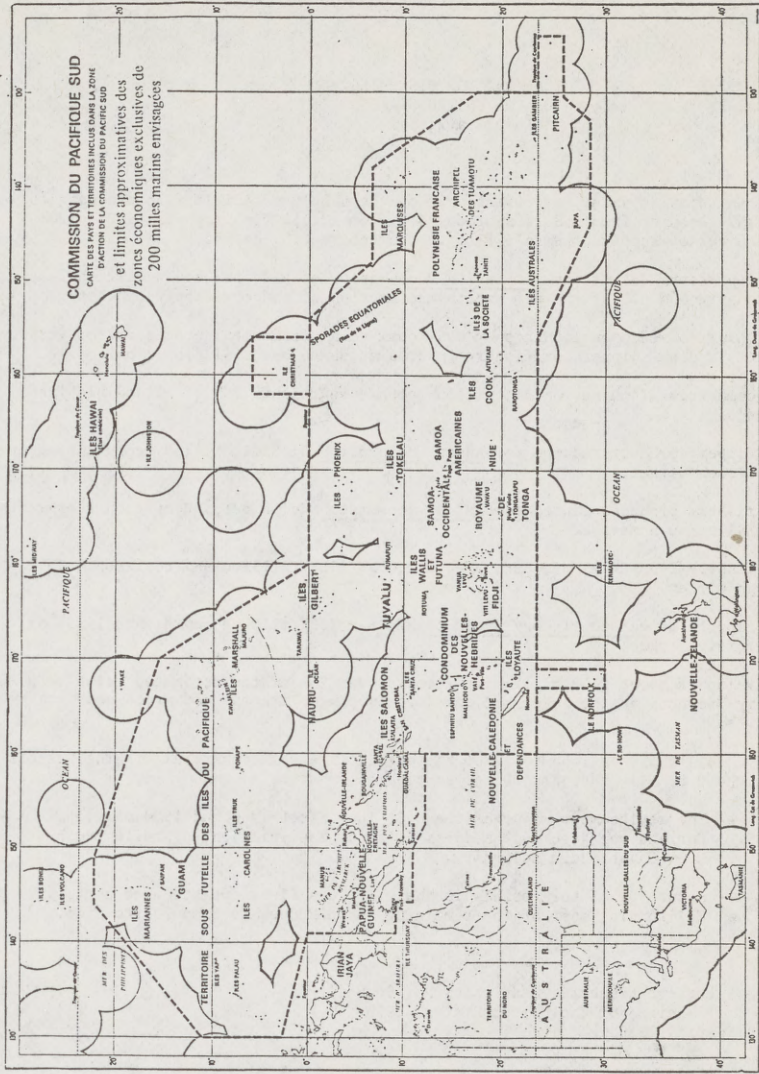
We urge the defeat of the Studds Amendment.

Thank you.

CHART A



SOURCE: INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)



Estimated boundaries by courtesy of ORSTOM, Noumea

Estimation des limites due à l'aimable concours de l'ORSTOM, Noumea

EXHIBIT 1TUNA AND THE FISHERIES
OF THE UNITED STATES
(1979 Statistics)

Tuna, in terms of value, represents 22% of the supply of edible fish products to the U.S. consumer from U.S. fishermen, 31% from edible fish imports or 27% from all sources of supply of edible fish to the entire U.S. market.

Tuna represents 25% of the per capita consumption of all fish and shellfish in the country and 67% of the per capita consumption of canned fishery products.

Tuna value, based upon landings by U.S. commercial fishermen, processors of fishery products and by shippers of fishery imports comes to about \$1.8 billion.

Tuna commercial landings of 514 million pounds represents 23% of all edible fish landings.

Tuna fishery products canned for human consumption of \$1.1 billion represents over 69% of such market.

Tuna fishery products canned for animal consumption of about \$80 million represents over 54% of such market.

Tuna fishery industrial products are valued at \$18.7 million and represents 35% of such market.

Tuna imports of edible fishery products of over \$387 million represents 14.5% of such foreign trade.

Tuna value of about \$1.8 billion represents over 23% of the estimated value of U.S. fishery products at the levels of domestic landings, imports and processed fishery products.

Tuna vessels represent about 31% of the entire fleet of commercial fishing vessels under the U.S. flag that are 200 gross tons or greater.

---- The replacement value of the U.S. Tuna Fleet is about \$800 million.
Current mortgage indebtedness is about \$300 million, as reflected by U.S. Coast Guard records.

---- About 70% of the vessels in the U.S. Tuna Fleet operate from ports in California, most of the remaining vessels operate from Puerto Rico.

Source: Current Fisheries Statistics No. 8000
Fisheries of the United States, 1979
April 1980

346

REVIEW OF CERTAIN MAJOR FISHERIES

LANDINGS OF TUNA BY U.S. FLAG VESSELS
BY OCEAN OF CAPTURE AND SPECIES, 1960-75

YEAR	ATLANTIC OCEAN					
	BLUEFIN	LITTLE	SKIPJACK	YELLOWFIN	UNCLASSIFIED	TOTAL
	THOUSAND POUNDS					
1960.	1,403	15	-	-	-	1,418
1961.	2,368	3	-	-	-	2,371
1962.	8,751	17	1,021	37	-	9,826
1963.	12,506	12	4,530	-	11	17,059
1964.	10,764	4	8,578	-	123	19,469
1965.	7,020	22	141	-	251	7,434
1966.	2,730	47	87	-	3	2,867
1967.	5,114	15	950	1,620	23	7,722
1968.	1,779	13	6,844	13,454	4	22,094
1969.	2,703	16	12,592	38,346	2	53,659
1970.	7,335	254	23,668	25,688	-	56,915
1971.	6,987	10	30,276	9,248	110	46,631
1972.	4,927	10	27,505	25,462	-	57,904
1973.	3,198	14	40,209	6,144	(3)	49,565
1974.	2,350	20	4/29,278	10,976	1	42,625
1975.	5,012	4	5/23,277	30,230	3	58,526

YEAR	PACIFIC OCEAN					
	ALBACORE	BLUEFIN 1/	LITTLE	SKIPJACK	YELLOWFIN	TOTAL
	THOUSAND POUNDS					
1960.	40,211	13,248	4	59,352	204,080	317,695
1961.	32,844	21,920	2	86,746	212,971	354,483
1962.	45,955	32,421	13	121,286	131,446	331,121
1963.	60,802	31,301	60	134,921	114,502	341,586
1964.	48,070	24,010	35	99,219	163,419	334,753
1965.	37,220	16,794	15	142,845	169,163	366,037
1966.	36,991	30,979	26	98,436	158,564	330,998
1967.	49,841	14,905	49	199,998	159,209	418,528
1968.	55,902	13,500	27	108,672	201,332	379,434
1969.	48,138	15,945	37	71,724	249,647	385,491
1970.	56,140	9,132	17	91,722	288,970	435,981
1971.	49,841	17,723	23	170,238	190,490	428,285
1972.	60,388	26,356	29	62,329	327,616	476,758
1973.	39,490	20,925	25	64,334	345,724	470,498
1974.	48,818	14,230	35	4/120,198	325,267	508,568
1975.	48,979	17,732	54	5/132,997	310,601	6/510,365

YEAR	TOTAL					
	ALBACORE	BLUEFIN 1/	LITTLE	SKIPJACK	YELLOWFIN	TOTAL
	THOUSAND POUNDS					
1960.	40,211	14,651	19	59,352	204,080	319,113
1961.	32,844	24,268	5	86,746	212,971	356,854
1962.	45,955	41,172	30	122,307	131,489	340,947
1963.	60,802	43,807	72	139,451	114,502	358,645
1964.	48,070	34,774	39	107,797	163,419	354,222
1965.	37,220	23,814	37	142,986	169,163	373,471
1966.	36,991	39,709	75	98,523	153,564	333,870
1967.	48,367	20,019	64	196,948	160,329	426,250
1968.	55,902	15,279	40	115,516	214,787	401,528
1969.	48,138	18,648	53	84,316	287,993	439,150
1970.	56,140	16,467	271	115,390	304,628	492,896
1971.	49,841	24,710	33	200,484	199,735	474,915
1972.	2/60,406	31,323	39	89,834	353,098	534,700
1973.	39,490	24,123	39	104,543	351,868	520,063
1974.	48,818	16,380	35	4/149,476	336,263	551,193
1975.	48,979	22,744	58	5/156,274	340,531	568,591

1/ INCLUDES DATA ON LANDINGS OF BIGEYE TUNA IN HAWAII.

2/ INCLUDES 18,000 POUNDS OF ALBACORE TAKEN IN THE ATLANTIC OCEAN.

3/ LESS THAN 500 POUNDS.

4/ INCLUDES 60,000 POUNDS OF BLACK SKIPJACK IN THE ATLANTIC OCEAN AND 86,000 POUNDS IN THE PACIFIC OCEAN.

5/ INCLUDES 60,000 POUNDS OF BLACK SKIPJACK IN THE ATLANTIC OCEAN AND 62,000 POUNDS IN THE PACIFIC OCEAN.

6/ INCLUDES 2,000 POUNDS OF UNCLASSIFIED TUNA.

NOTE:--INCLUDES LANDINGS IN PUERTO RICO, AMERICAN SAMOA, AND AT FOREIGN PORTS FOR EXPORT TO FOREIGN COUNTRIES.

SOURCE: Fishery Statistics of the United States, 1975

Statistical Digest No. 69, U.S. Department of Commerce

HISTORICAL FISHERY STATISTICS

TUNA CATCH BY SPECIES, ATLANTIC AND GULF COAST STATES, 1930 - 1957

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	BLUEFIN		LITTLE		SKIPJACK	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1930.	296	19	-	-	-	-
1931.	321	22	-	-	-	-
1932.	315	15	-	-	-	-
1933.	444	20	-	-	-	-
1934.	(1)	(1)	-	-	-	-
1935.	562	16	-	-	-	-
1936.	(1)	(1)	-	-	-	-
1937.	1,023	36	-	-	-	-
1938.	1,823	68	-	-	-	-
1939.	949	35	-	-	-	-
1940.	1,155	40	-	-	-	-
1941.	2,104	37	-	-	-	-
1942.	827	75	-	-	-	-
1943.	3,480	65	-	-	-	-
1944.	829	115	-	-	-	-
1945.	1,374	241	302	6	-	-
1946.	4,184	94	4,340	10	-	-
1947.	1,087	114	662	27	-	-
1948.	2,997	214	602	60	-	-
1949.	2,739	207	730	52	-	-
1950.	1,257	112	226	11	-	-
1951.	1,760	131	371	8	-	-
1952.	565	58	747	30	5,172	21
1953.	1,945	123	69	3	-	-
1954.	1,428	109	72	3	-	-
1955.	897	55	107	4	-	-
1956.	458	84	88	5	-	-
1957.	1,001	107	33	2	-	-

YEAR	YELLOWFIN		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
1930.	-	-	296	19
1931.	-	-	321	22
1932.	-	-	315	15
1933.	-	-	444	20
1934.	-	-	(1)	(1)
1935.	-	-	562	16
1936.	-	-	(1)	(1)
1937.	-	-	1,023	36
1938.	-	-	1,823	68
1939.	-	-	949	35
1940.	-	-	1,155	40
1941.	-	-	1,049	37
1942.	-	-	827	75
1943.	-	-	450	65
1944.	-	-	829	115
1945.	-	-	1,576	247
1946.	-	-	1,524	104
1947.	-	-	1,749	141
1948.	-	-	3,599	274
1949.	-	-	3,468	259
1950.	-	-	1,553	123
1951.	5,348	45	2,479	184
1952.	412	63	1,896	172
1953.	-	-	2,013	126
1954.	15	2	1,515	114
1955.	-	-	1,004	59
1956.	332	42	978	131
1957.	666	80	1,700	189

1/ DATA NOT AVAILABLE.

2/ AS A DETAILED SURVEY WAS NOT CONDUCTED IN THE NEW ENGLAND AND MIDDLE ATLANTIC STATES FOR 1941, DATA ON THE BLUEFIN CATCH FOR 1940 HAVE BEEN USED EXCEPT FOR LANDINGS AT BOSTON AND GLUCESTER, MASSACHUSETTS, AND PORTLAND, MAINE, FOR WHICH 1941 DATA WERE AVAILABLE.

3/ INCLUDES 1942 DATA FOR THE CHESAPEAKE BAY STATES AS NO SURVEY WAS MADE IN THIS AREA IN 1943.

4/ INCLUDES 1945 DATA FOR NEW JERSEY AND DELAWARE AS NO SURVEY WAS MADE IN THESE STATES FOR 1946.

5/ FISH WERE CAUGHT IN THE PACIFIC AREA, BUT LANDED ON THE ATLANTIC OR GULF COASTS.

SOURCE: Fishery Statistics of the United States, 1957
 Statistical Digest No. 44, U.S. Department of Interior

HISTORICAL FISHERY STATISTICS

TUNA CATCH BY SPECIES, PACIFIC COAST STATES, 1911 - 1957

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	ALBACORE		BLUEFIN		SKIPJACK		YELLOWFIN		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1911	1,290	5	-	-	-	-	-	-	1,290	5
1912	1/3,400	20	-	-	-	-	-	-	1/3,400	20
1913	1/6,600	53	-	-	-	-	-	-	1/6,600	53
1914	1/18,470	222	-	-	-	-	-	-	1/18,470	222
1915	21,074	316	-	-	-	-	-	-	21,074	316
1916	22,899	2/600	3/20,540	3/700	(3)	(3)	(3)	(3)	43,439	1,500
1917	30,556	2/1,222	1,150	25	420	11	-	-	32,126	1,258
1918	7,265	400	6,240	218	3,024	91	-	-	16,529	709
1919	13,531	845	14,991	(4)	6,897	241	348	(4)	35,867	(4)
1920	18,877	1,992	10,530	(4)	7,957	378	1,965	(4)	39,329	(4)
1921	15,277	1,222	2,032	(4)	1,139	25	1,238	(4)	19,686	(4)
1922	13,232	1,151	2,838	(4)	11,862	270	7,337	(4)	35,269	(4)
1923	12,515	1,627	3,301	(4)	11,463	298	10,537	(4)	38,116	(4)
1924	17,695	1,829	3,241	(4)	3,781	179	3,063	(4)	27,780	(4)
1925	22,207	2,333	3,804	(4)	4,235	752	13,238	(4)	53,484	(4)
1926	2,469	2/222	6,527	(4)	20,995	873	12,455	591	42,556	(4)
1927	4,579	517	4,898	312	33,807	1,261	25,934	1,304	69,218	3,394
1928	283	42	13,701	823	15,815	562	32,251	1,774	62,050	3,201
1929	269	40	7,527	490	26,998	1,081	37,399	2,200	72,193	3,811
1930	286	24	21,921	1,238	20,486	790	56,054	3,396	99,347	5,448
1931	37	3	3,534	169	16,507	504	36,580	1,979	56,658	2,655
1932	620	31	1,071	51	21,637	751	36,923	1,505	60,251	2,338
1933	2	(5)	560	29	16,687	613	51,076	2,275	68,325	2,917
1934	121	9	18,358	846	14,830	594	60,913	3,053	94,222	4,502
1935	2,448	200	25,173	1,145	17,197	688	72,252	3,620	117,070	5,853
1936	984	91	18,925	922	26,992	1,191	78,353	4,139	125,254	6,343
1937	3,520	287	12,694	725	47,104	2,319	91,523	5,458	154,841	8,789
1938	17,726	966	17,728	983	22,654	1,133	78,318	4,705	136,426	7,787
1939	18,922	1,009	11,836	602	30,121	1,300	110,418	5,912	171,297	8,823
1940	14,502	996	19,970	1,117	56,650	2,743	113,750	6,707	204,882	11,563
1941	11,932	1,712	9,519	581	25,586	1,362	76,702	4,851	123,739	8,506
1942	23,540	4,566	12,845	1,159	38,735	3,335	41,467	3,836	116,587	12,896
1943	37,518	6,104	10,178	967	28,894	2,583	49,262	4,881	125,852	14,535
1944	52,795	8,666	20,344	1,939	30,037	2,694	63,144	6,269	166,320	19,568
1945	39,483	7,697	20,594	1,984	33,348	2,952	87,448	8,718	180,873	21,381
1946	24,142	4,784	22,032	2,246	41,088	4,283	127,247	14,614	214,509	25,927
1947	26,844	6,780	20,838	3,321	52,749	7,628	153,510	23,919	253,941	41,648
1948	5/49,493	14,659	6,529	1,096	60,554	9,534	199,427	33,400	316,003	58,695
1949	54,794	10,039	4,369	713	80,512	11,923	190,544	30,999	330,239	59,674
1950	7/72,453	13,839	2,762	425	126,786	18,131	157,890	28,823	389,891	61,219
1951	34,491	5,403	3,862	604	116,599	16,655	151,431	24,961	316,433	47,623
1952	52,558	9,146	4,577	733	84,844	10,908	173,819	28,275	320,798	49,062
1953	34,700	6,920	9,773	1,550	122,978	16,943	133,340	21,313	300,791	46,726
1954	26,998	5,426	21,025	3,553	153,756	22,348	119,402	20,576	321,181	52,899
1955	29,738	4,826	13,609	1,941	102,807	13,799	123,208	18,869	269,362	39,435
1956	41,338	7,082	12,626	1,650	123,717	14,189	150,923	20,369	328,604	43,290
1957	46,659	6,732	20,315	2,417	90,821	9,991	137,240	18,194	295,035	37,334

1/ ESTIMATED ON THE BASIS OF PACK AS REPORTED BY TUNA CANNERS.

2/ ESTIMATED.

3/ THE CATCH OF SKIPJACK AND YELLOWFIN HAS BEEN INCLUDED WITH THAT OF BLUEFIN

4/ DATA NOT AVAILABLE.

5/ LESS THAN 500 DOLLARS.

6/ INCLUDES 132,000 POUNDS, VALUED AT \$32,000 LANDED IN ALASKA.

7/ INCLUDES 39,000 POUNDS, VALUED AT \$4,000 LANDED IN ALASKA.

NOTE.—DATA FROM 1911 TO 1923 BASED ON STATISTICS PUBLISHED BY THE BUREAU OF FISHERIES, THE CALIFORNIA BUREAU OF MARINE FISHERIES (FISH BULLETIN NO. 74), AND THE UNITED STATES TARIFF COMMISSION IN THEIR REPORT TO THE UNITED STATES SENATE ON TUNA FISH, REPORT NO. 109, SECOND SERIES.



SOURCE: Fishery Statistics of the United States, 1957
Statistical Digest No. 44, U.S. Department of Interior

The CHAIRMAN. George Steele?

Mr. STEELE. Mr. Chairman, I just have one other comment. I also regret that Mr. Studds is not here, because I would like to respond to one question that he insisted—that he is insistent in bringing up in all of these discussions. And that has to do with what he points out as being, quote, an inconsistency in the FCMA between the fact that tuna is included and billfish is not included.

I would like to remind Mr. Studds, if my memory serves me correctly, he was one of the people—and several people, members of this committee, were supporting his amendment—who specifically asked that billfish be excluded in the definition of highly migratory species when this committee and the Congress was passing the FCMA.

I would submit that the difficulty which the various councils are experiencing now, and the need which they recognize for international cooperation in conserving billfish just points up what my colleagues have said here. And perhaps we are, to quote Mr. Studds and Mr. Busby, being evangelical, because the only way that we can possibly conserve any migratory species, be it billfish, bluefin, or any tuna, is to do it on an international basis.

So if we are going to be consistent, then may I suggest that we be consistent with the only way that the scientists have been able to prove that we can do it—let's move billfish into the highly migratory species and seek an international convention to conserve billfish.

Thank you.

Mr. BURNEY. Mr. Chairman, Captain Sousa would like to say a few words.

The CHAIRMAN. Captain Sousa and I served in the 2nd Division about 30 years ago out in Korea.

Captain Sousa. That's correct.

The CHAIRMAN. So he can have as much time as he wants. [Laughter]

Captain SOUSA. In fact, the last time I spoke with you, we were talking ship to ship.

The CHAIRMAN. That's right; we were in the South Pacific, trying to find out what the problems were with the porpoise. And I think we had a successful trip down there.

Captain SOUSA. I am here because I am quite concerned about this bill. I can see the handwriting on the wall. I'm a third-generation fisherman; my son has my boat out now—he's a fourth-generation fisherman, and I hope my grandchildren will be the fifth-generation fishermen. My folks come from the old country, Portugal, landed in Massachusetts, did a little fishing in Massachusetts, and moved on to California and helped pioneer our tuna industry out there.

The thing that concerns me on this bill is if we put a 200-mile limit over here on the east coast, that's going to snowball to the west coast, and Mexico is going to put it and the Central American countries are going to put it, and the South American countries are going to put it. I know; I've been outside that fence looking in—I've been captured three times down there. I was thrown in prison for 3 days, maximum security, in Panama.

And if we have to sit outside a 200-mile limit looking in, you will have plenty of boats in San Diego, like 120 boats in San Diego—you can use them all back here for sport fishing boats, because they are not going to do us any good.

Thank you.

The CHAIRMAN. Thank you, George. Dave, what effect would a moratorium have?

Mr. BURNEY. Well, I think that was answered earlier, Mr. Chairman.

The CHAIRMAN. But it wasn't answered from the viewpoint of this panel.

Mr. BURNEY. I think the problem with the moratorium idea—first of all, we are still getting the science. I think it's been told over and over again that if we go back to IATTC—they started in 1948, couldn't really come up with a quota until 1966. Nobody is willing to have the patience with ICCAT. I recognize why they are impatient; I know that everybody wants a solution overnight. I think, as Mr. Carey says, the sea just doesn't give up its secrets very easy.

If you are going to have a moratorium, then, first of all, you have got to bring bluefin tuna under the jurisdiction of the FCMA. That in and of itself cuts our lifeline out. I don't think we can say it any more succinctly than Captain Sousa just said it. I hear over and over again that you don't need this protection of the Fishermen's Protective Act; gee, you get reimbursed for everything that you have to expend when you are seized. He spent 3 days in solitary confinement. I don't know who paid him for that.

Let's face it. When we get reimbursed, there is a provision in the Fishermen's Protective Act that that money can be deducted from the foreign assistance program of the country that imposed the fine.

So it's not like it's carte blanche for our industry. I do not believe that you can envision a moratorium, first, without having the necessary scientific evidence to support the fact that a moratorium is needed; and, second, to have a moratorium you would either have to get the agreement of all the countries within ICCAT or you would have to bring bluefin tuna under the jurisdiction of the FCMA.

If all the parties on the east coast feel that it is absolutely vital to have a moratorium on the taking of bluefin tuna, then that should be urged through ICCAT. You shouldn't try to yank bluefin away from ICCAT and bring it under unilateral management, which cannot be effective, and then seek a moratorium.

The CHAIRMAN. Is the bluefin, the eastern and western Atlantic bluefin, an endangered species or impacted species, or is there any danger to its stocks?

Mr. ALVERSON. Well, if you look at I think it's the Endangered Species Act, an endangered species is one that is threatened with extinction. I hardly think the Atlantic bluefin is threatened with extinction. As I pointed out, the catch in 1968 was in the neighborhood of 16,000 tons, and in 1978 it was about 22,000 tons. I don't think this species or stocks are threatened with extinction.

Furthermore, I think we should note that there is no biological law that states that the bluefin should appear at the same place at

the same time in the same abundance every year. These things are highly migratory and subject to the oceanic regime, and they are going to move about as they see fit.

I think someone pointed out here that there was a large fishery off Norway apparently in the fifties and early sixties, and that has declined considerably. Of course, as other people got into the act, some of the fish which showed up off of Norway have been caught by other people.

There is another factor which may be involved. In the early sixties the Atlantic Scandinavian stock of herring was large, and then the stock started to decline sharply. And fish are a lot like fishermen—they like to go where the action is and they can eat.

So the ocean is subject to all sorts of switches and changes, and we should be cognizant of that fact. I don't think the bluefin are threatened or endangered.

The CHAIRMAN. Is the science and the body of science and the study of the bluefin as extensive as that on the yellowfin?

Mr. ALVERSON. With respect to the eastern Pacific, I think the answer has to be no. We have had a commission there for 30 years which has been collecting extensive information on catch effort and abundance. And I think that one of our problems in the Atlantic—and Mr. Broadhead could comment on this better—is the fact that we really don't have good data with respect to effort and, hence, abundance in this ocean. And I don't think the statistics on catch are as good as they are in the eastern Pacific either.

Mr. FELANDO. One of the interesting things with respect to the U.S. purse seine fishery off the east coast is the very high catch per effort. They are catching the quota within days.

In 1979, I believe, the entire quota of about 1,000 tons that was allocated to the school purse seine fishery was caught within 5 days. The record is pretty clear that if somebody was analyzing the catch per effort statistics, how many tons of fish you would catch per day, for the U.S. purse seine fishery it's been extremely good off the east coast. Now, this might be a measure of availability, but nevertheless there is a high catch per effort for the U.S. purse seine fishery that suggests that maybe the stock is in pretty good shape.

The other thing that I think we are finding out here since the Commission has been around, that we were a little surprised about the extent of the longline fishery suddenly in the Mediterranean in the seventies. Now we are a little surprised about the extensive surface fishery—the Italians have quite a purse seine fishery in the Mediterranean. In 1 year I believe the total catch approached 10,000 tons.

Now in recent years we are suddenly surprised about the giant bluefin tuna available in the Gulf of Mexico. I think we are just starting to find out a lot of things about the bluefin fishery. There is a limit; there is going to have to be a quota. But that is quite a different statement than to say that the stock is facing extinction, the stock is facing depletion—I don't think that has been established by the record. I think there is concern, and rightful concern, about the limits.

The CHAIRMAN. The United States obviously cannot impose a unilateral limit on something that is not under its control.

Mr. FELANDO. That's right, and when you look at the fishery, the Japanese fishery—and I am talking about their longline technique—or the Taiwanese or the South Koreans. That fishery doesn't just stop within the FCZ; it goes right across the Atlantic.

And the Japanese, just like we are, they have the gear, the vessels, and the know-how—and I think they have more know-how than we do—when to follow the fish.

The CHAIRMAN. Mr. Anderson?

Mr. ANDERSON. No questions.

The CHAIRMAN. Mr. Forsythe?

Mr. FORSYTHE. Thank you, Mr. Chairman. Mr. Alverson, I finally found the scientist. Do you recall the question that I have been trying to find the scientist to answer—if we try to regulate only the bluefin, can we separate it from other tuna? In other words, are we going to get into trouble with the rest of the fish we regulate?

Mr. ALVERSON. I think you were referring to the longline fishery, if I am not mistaken?

Mr. FORSYTHE. Yes.

Mr. ALVERSON. Is that the thrust of your question?

Mr. FORSYTHE. Yes.

Mr. ALVERSON. Well, I think to some extent that's going to be difficult depending on where you are trying to regulate. For instance, in the Gulf of Mexico, the bluefin catch is very heavy by the Japanese January through April; it's fairly well limited to the bluefin, although there is yellowfish and others taken.

However, if you talk about other parts of the Atlantic, if one looks at the longline records, there are areas where the primary goal is bigeye and possibly albacore, and bluefin is, quote, the incidental take.

Mr. FORSYTHE. The whole thrust of this is to protect the bluefin; and the thrust of what I was trying to get at and you really can't separate it.

Mr. ALVERSON. I don't think you can select out just the bluefin and protect it on its own. And, furthermore, I don't think you can protect the bluefin if it's just in the U.S. FCZ, period, because there are too many other players in the ballgame that can continue to fish on the same bluefin that show up in our waters on a seasonal basis.

Mr. FORSYTHE. Well, if you are going to do it, then you would have to take all the tuna in at least if we are going to try to protect all migratory fish you would have to do that.

Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. Gentlemen, thank you very much.

JOHN BRYSON, EXECUTIVE DIRECTOR, MID-ATLANTIC FISHERY MANAGEMENT COUNCIL; DAVID FYRBERG, TRI-COASTAL SEA-FOOD CORP., INC.; AND FRANK J. MATHER III, SCIENTIST EMERITUS, WOODS HOLE OCEANOGRAPHIC INSTITUTE; A PANEL

The CHAIRMAN. The next panel, Mr. John Bryson, executive director, Mid-Atlantic Fishery Management Council; David Fyrberg, Tri-Coastal Seafood Corporation; and Frank Mather, scientist emeritus, Woods Hole Oceanographic Institute.

Mr. Bryson, we will place all statements in the record in their entirety, if you would summarize briefly for us so we can get to some questions.

MR. BRYSON. Thank you, Mr. Chairman. I will try to summarize.

The Mid-Atlantic Council is pleased to have the opportunity to appear this afternoon, and we do support the inclusion of the Atlantic bluefin tuna, that is, the *Thunnus thynnus thynnus*, within the purview of the FCMA. Now, this is a different sub species from the Pacific bluefin tuna, the *Thunnus thynnus orientalis*. We are talking about a different sub species, and I don't think the two should be confused.

We feel that the bluefin, the Atlantic bluefin tuna, can be managed to the advantage of the U.S. fisheries. We understand some of the concerns of other groups that this is a snowballing concept, that once the Atlantic bluefin is under control, others may follow—and I can't comment on that except that will be something that you gentlemen will have to decide at some later date.

The International Commission has stated that they feel that the effects probably will be realized wherever the fish are controlled; and we agree with that—we think this will be a positive effect on this area.

As far as the other countries' impacts, some of those other countries we are worried about seem to already have control, that is, Ecuador, Peru, Chile, Mexico, Costa Rica, Canada, P. G., New Guinea, and Samoa.

We do not believe the bluefin tuna is a highly migratory species except by definition of the FCMA. It is, in our opinion, an occasional migratory fish, at least certainly as far as the school tuna is concerned. The tagging studies and results of those would show roughly 2 percent to be highly migratory. I don't feel that is enough to put it under the highly migratory definition.

One of the problems with the exclusion of the bluefin tuna is in trying to regulate—and it's been brought out earlier, some of the other species such as the Atlantic billfish, the swordfish, and shark. When the South Atlantic Council attempted to draft a regulation on billfish, it found some rather strong language coming back to it. And I wish Congressman Breaux were here to hear some of these comments, or at least reference to them.

The legislation now coming down that we must provide reasonable opportunity for foreign longline vessels to fish for tuna in the FCZ, impose the least burden on such vessels that would achieve conservation management, and must evaluate the purpose of the management measure, give the expected effect of the measure, give the factual basis for the expectation, show any alternative methods of achieving the same objective, and evaluate the need—I think the South Atlantic did a pretty good job on doing most of that, and if I may quote from the State Department for a moment in a letter to the chairman of that council:

It is the view of the Department of State that the proposal contained in the draft billfish FMP not throw out any foreign longlining in the FCZ and the Gulf of Mexico from May 16 through October 31, and the FCZ in the Atlantic during the months of June, July, August, and September, are sweeping closures which are in effect a direct and severe restriction on foreign tuna fishing which could ultimately have a serious negative impact on access by the U.S. tuna fleet of the fisheries off the coasts of other countries. We do not believe such closure to meet the balancing

tests considered necessary for the regulation of foreign longlining, and don't support the plan.

Now, maybe the timing is a little longer than is absolutely necessary. We didn't hear from either State or NMFS that, if it were to cut down the closure time some, it would be satisfactory—simply they opposed it.

The councils find themselves in the position, then, of trying to regulate these species in the absence of tuna control—and I am not talking about total tuna control, just the bluefin, which seems to be the most problem.

It is a problem for us. I do not understand, however, some of the statements made today about the international management. If this were placed under FCMA, I can see the position of the United States then, being developed by the councils maybe rather than the present procedure. But I don't see how that is necessarily in conflict with international management or international agreement.

If one is to assume that the councils are not cognizant of the world need for fisheries—I think that's erroneous. If the concern is that we are more concerned with the U.S. fishermen than we are foreign fishermen, then you are probably totally correct.

But we do need to be able to recognize some of the problems we have and how we are going to solve them. We do not again understand that this is necessarily a conflict because bluefin may be placed under the FCMA. I don't see how that conflicts with any international agreements or presents any unworkable problem.

Thank you, sir.

[The following was received for the record:]

STATEMENT BY JOHN C. BRYSON, EXECUTIVE DIRECTOR, MID-ATLANTIC FISHERY
MANAGEMENT COUNCIL

The Mid-Atlantic Fishery Management Council is pleased to have the opportunity to present you within its views on including the Atlantic bluefin tuna (*Thunnus, thynnus thynnus*) with American fisheries jurisdiction under the FCMA.

The Atlantic Bluefin tuna is, in the opinion of the Mid-Atlantic Fishery Management Council, a prime candidate for inclusion as a species to be managed under the FCMA. We trust that the same logic that led to the passage of the FCMA and the inclusion of such migratory species as billfish, swordfish and sharks will again prevail in the inclusion of Atlantic bluefin tuna.

As we indicated in our letter of July 18, 1979 to Congressman Studds (copy attached), the Mid-Atlantic Fishery Management Council is fully supportive of H.R. 4357 and any similar legislation which will bring the Atlantic bluefin tuna under American fisheries jurisdiction. We feel as did the International Commission for the Conservation of Atlantic Tunas that "it is probable that the results of management action will be most clearly felt among the fisheries on the same side of the Atlantic as the action is taken . . ." We are also aware of the fact that our sister Councils on the east coast have adopted similar positions in favor of including the Atlantic bluefin in the FCMA. Since we are dealing here with an Atlantic problem, it would seem that the comments of the people directly affected with the fisheries in the Atlantic should be carefully weighed in considering this measure.

The Mid-Atlantic Council is not opposed to rational international management and agree with the way H.R. 4357 addresses this issue. The international management has established a system which we feel is totally inequitable to U.S. fishermen. We are in a position where the first crack at bluefin in the FCZ is given to foreign fishermen and then our own fishermen have to be tightly restricted with quota and gear regulations. We do not believe this to be Congress' intent in creating the FCMA. By placing bluefin within this management structure, we can return our own bluefin fishermen to the level of top priority which they deserve.

We have been told that including the Atlantic bluefin tuna in the FCMA will cause problems for the tuna fisheries of the Pacific. We do not see how this could really be true. The countries which are so often used in this argument have already placed tuna under their own control and the Atlantic bluefin tuna is not even one

of the species off their coasts. How could our desire to adequately manage an Atlantic species occurring predominantly in our waters bother fisheries in the Pacific? We do not see that the other countries have changed their attitude about reciprocity since this argument was first brought up in an attempt to defeat the passage of the FCMA. Certainly it is even weaker when applied to just the Atlantic bluefin.

The population of bluefin tuna in the western Atlantic will certainly benefit from management within 200 miles of our coast. The body of fish in our waters is set apart to a great degree because of the nature of its life history and behavior. The spawning grounds in the western Atlantic (Gulf of Mexico) area are mostly within our FCZ. As demonstrated by tag returns, the vast majority of young, immature fish up to age 5 have been shown to remain in the western Atlantic to feed and grow. These fish of age 1-6 are found throughout the year in our Atlantic coast FCZ in one fishery or another. Unfortunately, one of these, the offshore winter fishery, is conducted by foreigners over whom we have no control. This fishery is able to wantonly catch all the maturing bluefin which in recent years the United States has been making a concerted effort to conserve so we could begin to rebuild the previously depleted medium sized group of fish. Finally, many of the older spawning fish, which are the ones taken first by the foreigners in the Gulf of Mexico in spring, spend the summer and fall feeding in the waters of New England and Canada. The connection between the spawning and feeding areas which completes the cycle of the western Atlantic migration pattern has also been shown by tag returns. Trans-Atlantic movement has been shown but this is predominantly by the larger fish and then only by a few tagged in one area (the Bahamas). These data do not support calling bluefin highly migratory but rather occasionally migratory and at that we are speaking of only a limited segment of the population.

We are also aware that both U.S. and Canadian scientists agree that there is most likely a body of fish which spawn and remain in the western Atlantic to the degree that unilateral and/or bilateral management in this area will improve the stock. Our fisheries are somewhat different, however, as Canadian fishermen catch only the larger, mature fish in their waters while U.S. fishermen catch all sizes. The Canadians have already chosen to manage the bluefin in their waters. Since our U.S. fishermen have always taken their entire catch of Atlantic bluefin tuna within the U.S. FCZ and now must be severely restricted while foreign nations take these same fish in U.S. waters, we feel it is necessary for you to protect the rights of our citizens by enabling the Councils to protect the fisheries for them. Contrary to the opinions of some federal agencies, we feel bluefin tuna can be managed to the advantage of U.S. fishermen.

An additional problem which has been created by the large foreign catches of spawning bluefin in the Gulf of Mexico is the large bycatch of and mortality to Atlantic billfishes, swordfish and sharks. These species cannot be avoided and although the foreign fishermen return them to the ocean, we have no control over their condition which is, for the most part, very poor. We must have control of the primary catch during this fishery so that we can not only adequately manage it but also manage those other species which are of major importance to our fishermen and for which the foreigners have little concern.

Thank you for your attention and I hope we have provided you with information which will help you in this important decision for the U.S. Atlantic bluefin tuna fish and fishermen.

The CHAIRMAN. Mr. Fyrberg.

Mr. FYRBERG. Yes, Mr. Chairman. I find myself on the horns of a dilemma here today. I came down here at the request of Frank Cyganowski [phonetic] and Mr. Frank Carlton, two people who called and asked if I would present some testimony today in favor of this legislation. And I put together a short statement which I was prepared to read, which gives some background information on what we have all been talking about here, as I see it, and also would have lent my support to this bill.

But when I hear comments such as "moratorium," when I hear Dr. Frank Carlton say such things that if the entire or a portion of the catch allocated to the Japanese longline fleet under the current ICCAT provision were to be removed from that group, that it wouldn't necessarily mean that a portion of that quota would be divvied up, so to speak, among American fishermen—I begin to

seriously question whether or not I am on the right side of the fence.

I am Dave Fyrberg, and I come here as the general manager of Tri-Coastal Seafood Cooperative, Inc., as well as being an advisor to the U.S. Commissioners to ICCAT.

Tri-Coastal is a fishermen's cooperative marketing association which represents 150 bluefin tuna fishermen from Maine, Massachusetts and New Hampshire. Most of Tri-Coastal's membership are full-time commercial fishermen who lobster, gillnet or drag for other species of fish when bluefin are not available. However, in these days, when flexibility means survival, these people have become increasingly more dependent upon this fishery for part of their livelihood. There are also those who have made a total commitment to this fishery as their life's work.

As you may well imagine, these people have been severely impacted by Federal regulations which have all but made this fishery a recreational pursuit.

There are those who would like to see the bluefin strictly as a big game fish sought after by purists with rod and reel. However, all of the jumbo tuna that I know of landed in the northwest Atlantic these days are sold.

Just to set the record straight, this is a commercial fishery. We are talking about an important food fish that is utilized around the world as a source of protein, even though there are those who came earlier to deny that. Yet the National Marine Fisheries Service has continued to manage this fish as a recreational species. This has meant people management, restricting those who are capable of catching these fish on a regular basis from working at their peak efficiency, so that John Q. Public has the opportunity to pursue one of these jumbo tuna.

There are so many inequities in the current management scheme that all boil down to the same common denominator: too few fish to go around in order to satisfy all of the factions involved in the fishery.

At one time, the handgear people whom I represent, as well as the purse seiners, were able to pursue this fishery unrestricted. The ability of the fishermen and the availability of the fish were the controlling factors in this instance. If you were good at your trade, you made it; if not, you dropped out. Now we have a situation whereby NMFS fosters ineptness and inefficiency by equating a commercial fisherman and a sport by reducing the catch rate to one fish per day, the lowest common denominator. Just think of the energy aspect of this scheme, the waste of \$1 per gallon fuel that goes into catching one tuna at a time.

This problem of small U.S. quotas goes back to the "Doomsday sellers" who felt that giant bluefin were an endangered species and that there were only 9,000 of them, of these creatures, left in the entire northwest Atlantic.

Well, the Japanese proved them wrong by catching 15,000 giants in the Gulf of Mexico that very year that this cohort analysis was presented by NMFS as an indication of relative population trends. Now we face a situation whereby Japanese distant water longliners are catching many times what our quotas allow U.S. fishermen to catch.

Various pressure groups forced the United States to initiate measures in ICCAT which would limit the catch of bluefin to recent levels as of 1973-74 by member nations. Japan transferred its effort from the Mediterranean Sea to the Gulf of Mexico and legally may take the tonnages that it is now harvesting under the ICCAT regime, as it stands.

The problem lies with the fact that the U.S. has more interest and effort on bluefin now than during that period of time that was used to calculate the allowable catch levels. This is coupled with the fact that United States fishermen have been bound by ICCAT whereas the Japanese boats seem to have circumvented the intent of the wishes of this organization.

The answer is probably somewhere between dark and daylight, which is to say that the U.S. predictions based on insufficient data in previous years created abnormally low quotas for U.S. fishermen, while Japan, being more knowledgeable about this species, took advantage of the situation.

The United States is now hamstrung by this initial blunder, and the conservation measures seem only to apply to U.S. fishermen. Therefore I would suggest that placing bluefin under the FCMA would accomplish a twofold result: Japanese effort in the gulf could be controlled, and hopefully this would allow reasonably larger domestic quotas which would allow commercial interests to operate more efficiently as well as providing for the conservation of the bluefin tuna.

As I said before, that's my statement, but I have to qualify it. If I have been hoodwinked, which is easily done—I'm a country boy—then no way would I feel comfortable in speaking for the people that I represent, who are commercial fishermen, and want a larger percentage of these fish available to them, or at least a means of harvesting them effectively and efficiently so that they can make money at it. This is a business, an export business to Japan—dollars going in the right direction in my book.

And if this whole thing was misrepresented to me, then I am going to take the wait-and-see attitude.

Thank you.

The CHAIRMAN. Thank you. Mr. Mather?

Mr. MATHER. Mr. Chairman and members of the committee, and fellow participants, I am very honored to be allowed to participate and present my views here. Unfortunately, since I am a last-minute addition to the line-up, so my presentation is not as organized as those of my predecessors. Please bear with me if it is somewhat rambling.

I am a scientist who has been studying bluefin tuna about 30 years at the Oceanographic Institution in Woods Hole, often in conjunction with the National Marine Fisheries Service and other research organizations. I've been an adviser to the U.S. ICCAT commissioners and delegation, and a member of the advisory committee to ICCAT for the past few years. I will confine my remarks mainly to information on distribution and migrations of the bluefin, and how they might compare with those of other tunas and relate to the feasibility of unilateral U.S. tuna fishing management within the 200-mile zone.

Much testimony today stressed the wide geographical distribution of the bluefin and how only a small percentage of this distribution is in the management zone. This point is applicable, however, only if the population density, is uniformly distributed over the entire area. This is far from the case. Although the fish is migratory, as has been pointed out, the character of its migration is quite different from most of the other commercial tunas, such as the yellowfin, the albacore, the bigeye, and the skipjack. The seasonal distribution pattern of the mature bluefin can actually be reduced to a three-phase migration.

There is a summer and fall feeding concentration in coastal waters. In this period the vast majority of the bluefin tuna in the western Atlantic are very densely concentrated in the United States and Canadian zones between Cape Hatteras and Newfoundland. Some oceanic distribution is indicated by longline catches. In this season the catch rates have been extremely low; about 2 fish per 1,000 hooks or less compared with catch rates as high as 50 fish per 100 hooks realized during the summer-fall concentration especially in midocean. Bluefin are extremely susceptible to purse seine fishing in this area and during this season because they are so densely concentrated.

During the winter, the larger fish disperse over an enormous oceanic area, perhaps extending from Bermuda and Cape Hatteras as far south as Brazil. Longline catch rates in this season, however, are also very low, indicating that this distribution for the most part is extremely thin.

During March, April, and May, a western Atlantic spawning concentration occurs in the Gulf of Mexico. I believe that other spawning concentrations which have not been located or exploited as yet exist. The Gulf of Mexico concentration is quite dense and the bluefin are quite vulnerable to longline fishing at that time. The catch rates, however, aren't spectacular. By setting 50 miles of longline gear, a boat can catch a few large fish, so that a longline fleet does take a considerable catch, as has been pointed out.

So while the 5 percent of total distribution which in this zone may be trivial in the sense of area, but in the sense of population, during the feeding and spawning seasons—very large proportions of the western Atlantic population in the United States and Canadian zones. The 5-percent figure is therefore quite misleading in terms of numbers of fish.

As regards the problem of the mixing of bluefin with other tuna species, I would say that during the summer-fall concentration in coastal waters this is negligible. There would be no problem in controlling bluefin fisheries without affecting other species of commercial importance in this period.

In the spawning season, I am not quite so sure on this, but I feel that bluefin is predominant in the period of April, May, and June in the Gulf of Mexico, and that other species, such as yellowfin and marlins, become more important later than that. So again I think there would not be a terribly traumatic thing about separating them.

In the winter when the larger bluefin are very widely dispersed, they may well occur with other tuna species. The catch rates are

low in that period, however, and much of the fishing occurs outside the United States and Canadian zones.

Getting into trans-Atlantic migrations, I know Dr. Alverson said we shouldn't talk about tag returns, but I am going to do so anyway. He mentioned that you need to extract the same season recaptures. Well, for small tuna I would agree with him the small tuna trans-Atlantic migrations have been recorded from releases in waters off the United States in one summer and recaptures in subsequent summers in Europe. The tuna which has been recaptured locally the same summer in which it was tagged has had its ticket canceled.

Large tuna, however, have been recaptured in European waters within 50 days of their release off the Bahamas. In this case, therefore, the extraction of early recaptures is not as important.

About 18,000 small bluefin have been tagged in Western Atlantic waters during the warm season. About 2,100 tags have been returned from fish which have been at liberty for 6 months or more; 98 percent of these were recovered in the Western Atlantic, nearly all of them in the warm season. Only 2 percent were recovered in European waters, also in the warm season.

So I would say that Congressman Studds is quite right in saying that the tag returns do not indicate very massive trans-Atlantic migrations.

It is also interesting that these trans-Atlantic recoveries occurred in flurries; we usually got several returns in 2 or 3 consecutive years, and then none for 10 years or so.

In a typical cyclical migration fish return annually to the same area in the same season. This is what occurs with the 98 percent of the recaptures which occur in American waters, but not in the case of those in European waters. The trans-Atlantic migration evidently represent deviations from a normally cyclical migratory pattern.

About 4,000 adult bluefin have been tagged in the western Atlantic; 116 of these were recaptured in local waters, or 92 percent; 10, or 8 percent, were captured in various foreign waters, mostly in Norway. Again, this doesn't look like a huge migration. And, again, it is a sporadic occurrence; you don't have one every year; you get one year where you have several, several years you get none, and then another year you get a few more. Some giant bluefin tagged off the Bahamas have been recaptured off Norway at the same time that others have been caught off New England and Canada. The returns therefore do not indicate a regular cyclical migration from the Bahamas to New England, Canada, and Norway, resulting in regular trans-Atlantic mixing.

Mr. Leitzell made reference to other studies, in addition to tagging, which confirm his view of great mixing. Although tagging has many limitations, these other studies he mentioned are much more limited. Upon talking to the principal authors, I have found that these works were preliminary of preliminary feasibility studies of maybe-we-can-find-out-something; they were not intended to be conclusive indications of anything. They just say, well, gee, we tried to do this and we got these results from a very small sample. The parasite study, the author never even defined the distribution of the parasites which were used as tags. In fact, I think we know a hell of a lot more about bluefin distribution than we do about the

parasites which were supposedly used as tags. I may be prejudiced, but I think the tagging information is the best measure of mixing we now have.

Again it has been alleged that the very high return rates which indicated high mortality rates for young western Atlantic bluefin were obtained mainly in the season of release. In a great many years we actually got more returns in the season after the one in which fish had tagged than we did in the year in which they had tagged, although obviously there were fewer tags available to be recaptured in the second season.

Getting to the difference between one stock or two stocks theories, the consensus of ICCAT was that it is either one stock with separation of small fish, or two stocks with mixing of large fish. To my mind this is a very academic distinction in terms of management strategy. What we must know is the mixing rate, and the only evidence we have on the mixing rate which is at all convincing is that it is very small.

So while only a small percent of the area of the distribution may happen to be in our management zone, a very heavy proportion of the population or the stock of bluefin we are working on is in that zone for the two most important fishing seasons. When they are out of the zone they are very thinly distributed, for the most part, so that very big catches are not very probable.

Among other considerations that haven't come up here but have been talked about at ICCAT and which might be enacted or looked at more closely, if we did have management under the 200-mile zone, is the optimum size of first capture for bluefin tuna. There have been several studies on this at ICCAT, and this is one area in which there is practically no disagreement. The only disagreement is whether we ought to start catching them at 150 pounds or 300 pounds, somewhere in that range, to get the maximum long-term yield from the stock. So that is another thing that might be considered. The catching of small bluefin is just extremely wasteful. Even though the U.S. tuna industry has "educated" the great American housewife to believe that dark meat tuna should not be eaten, such tuna are valuable on the international market.

Catch per effort in the seine fishery was mentioned as evidence that the bluefin problem has disappeared. That's a very tricky thing in a seine fishery with a schooling fish because, when an aggregation of such fish has been reduced, it does not occupy the same space that it previously did. In other words, if you get rid of half the tuna, they aren't distributed over the whole area, which they had previously occupied; they will be in approximately half that area. So it will not be more difficult to catch them; in fact, it may be easier because they are concentrated in a smaller area. This phenomenon has been well documented in scientific literature. My friend Johannes Hamre in Norway, pointed this out with the local mackerel fishery; he worked on catch per effort and found that there was no indication of any change in the stock size as the results. He also studied tag return data—he had a much more sophisticated and larger scale of a tagging system than we did, and that showed a consistent decline in the stock. On the last year of the fishery, both the curves derived by both methods met at zero. But the curve from catch per effort had given no warning what the

curve from the tag returns clearly indicated overexploitation. Therefore I think that, in a seine fishery catch per effort data should be looked at with great caution.

As regards my experience in ICCAT, I share Frank Carlton's view that I would like to see this amendment if possible altered to not involve our total abandonment of ICCAT. I feel that the scientific meetings have been very instructive, helpful; they are a real good way of getting information around much quicker than is possible through the press.

The CHAIRMAN. You feel then, that ICCAT has been effective.

Mr. MATHER. Well, in a sense it has. I don't say it has been effective as it might have been, but I think it has been very effective promoting the exchange of information. I also feel that the regulations which have been put in place by the United States under ICCAT, particularly with regard to reducing the catch of small bluefin, have been very beneficial. Actually the local New England seiners at my suggestion laid off the very young fish of the strong year class of 1973, even before the regulations went in. The fortuitous appearance of that year class and a little exercise of human intelligence, for a change, by fishermen and regulators have given us a chance to save the Atlantic bluefin tuna.

The CHAIRMAN. What effect would it have on ICCAT if Cuba, Mexico, the Bahamas, and Venezuela started to fish for bluefin down in those spawning areas that you mentioned?

Mr. MATHER. Well, if the regulations were enforced as they now stand, they wouldn't be able to fish much, because the fishing mortality can only be as high as it was in recent years, and—

The CHAIRMAN. But some are not members of ICCAT

Mr. MATHER. Well, Cuba is, but if a nonmember goes in there, it could have a very heavy effect, no question about it. Cuba is a member, but if other nations go in there, as they well might, ICCAT would be totally ineffective to do anything about it. In that case, the use of the 200-mile law would be our only recourse.

The CHAIRMAN. Those are migratory fish, so it wouldn't have an effect, would it?

Mr. MATHER. Well, as I have stated, the feeding concentration could be almost entirely controlled if we act jointly with Canada, which I am sure we can; and the spawning concentration—we don't know the extent of the spawning area, but where they are now catching spawning fish I think would be very largely controlled. I wouldn't put a figure on it, but I think we would control a very large percentage of the fisheries that now exist.

The CHAIRMAN. What effect would a moratorium have?

Mr. MATHER. Well, a moratorium, naturally, would accelerate the rebuilding of the stock

The CHAIRMAN. Isn't the stock a healthy stock and doesn't need rebuilding?

Mr. MATHER. Let me go back a little bit. The big problem with the stock has never been a lack of small fish, because the spawning stock of very big fish has hung in surprisingly well. I think their longevity has increased because of less competition for food.

But the big problem with the stock has been there has been nothing between the small fish, say, up to 100 pounds, and the big ones, which now start at about 500. Thanks to the regulations,

there has been some appearance of intermediate sized fish to fill that gap. And I think it is essential to fill that gap. If we stand by the present regulations, we have a good chance of doing it, but if the spawning stock is wiped out before that gap is refilled, we will be in bad shape. Also if we resume the slaughter of small fish to the extent that practically none of them escape to become spawners, we will be in bad shape.

The CHAIRMAN. I would like to yield to Mr. Anderson at this point.

Mr. ANDERSON. Thank you, Mr. Chairman. I would like to have a little clarification on this migratory question. Now, you say that in April, May and June—this is the western Atlantic bluefin—they are in the gulf spawning. And then in the summer and the fall you say they are up off New England and in the Canadian water.

Mr. MATHER. Right.

Mr. ANDERSON. Then, I think you said in the winter they were all over the place.

Mr. MATHER. Well, this varies with the size of the fish. The larger fish are the ones which disperse very widely and congregate in the gulf, and the smaller ones do not migrate to that extent.

Mr. ANDERSON. Well, where do they spawn?

Mr. MATHER. Well, there is a big argument about that. I think the medium size fish, of which there haven't been much of any in recent years, spawn east of our Middle Atlantic States in or on the northern edge of the Gulf Stream, but not many people believe me.

Mr. ANDERSON. Then they don't spawn up off the New England coast, do they? They have to spawn down somewhere in the warmer waters.

Mr. MATHER. There is no evidence that fish of this size occur in numbers south of the Gulf Stream. So in my opinion they have to spawn north of the Gulf Stream. And we have also caught some ripe fish and collected some larvae in that area at a time when there were a lot of those fish available in the 1950's and early 1960's.

Mr. ANDERSON. Now, on the other side of the Atlantic, the spawning in April, May, and June, I suppose, is in the Mediterranean.

Mr. MATHER. It's principally in the Mediterranean but mainly—well, maybe June, July and possibly in August—it's considerably later there.

Mr. ANDERSON. Then do they work themselves up off western Europe and up into the North Sea off Norway?

Mr. MATHER. They have a more complex pattern than ours do apparently. Some of the small fish go to Morocco and the Bay of Biscay. Big ones and medium ones used to go to Norway, but that fishery, as has been mentioned, has practically gone to hell in a handbasket. They used to catch a lot of outgoing large fish off the south coast of Spain and Portugal, but that fishery has virtually disappeared. They catch incoming fish in traps off the Atlantic coast of Morocco and Spain. That fishery virtually disappeared in the early 1970's, but it has now bounced back to maybe 6 percent of what it used to be.

Mr. ANDERSON. In the winter, does the eastern bluefin tuna then also go all over the place, all around the Atlantic? And is that when you have your mixing?

Mr. MATHER. Yes, I would say so. This is conjectural, but from looking at the distribution charts—I wouldn't know for sure where the eastern ones begin and the western ones end.

Mr. ANDERSON. This would lead me to believe, then, that the bluefin tuna is a rather highly migratory fish. And I was rather stumped a moment earlier when Mr. Bryson said that only 2 percent of them were migratory, and I don't quite—

Mr. MATHER. I think Mr. Bryson was speaking in the sense of going from one general fishing area—the western Atlantic—to the other—the eastern Atlantic. I don't think anybody questions the fact that tuna is migratory—but what you call “highly migratory” is a relative term and the frame of reference has not been clearly defined.

Mr. ANDERSON. It's my impression that if they start in the gulf, in the Bahamas area, where they are spawning, work up along the east coast off New England and up off Canada, and then, in the winter time “go all over the Atlantic”—to me that is pretty migratory.

Mr. MATHER. Yes, it is migratory. I was speaking from the viewpoint of the possibility of controlling fisheries, and in that sense we have a better grip on them than this 5 percent of the area distributional indicates.

Mr. ANDERSON. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Forsythe?

Mr. FORSYTHE. No questions.

The CHAIRMAN. Gentlemen, thank you very much. We certainly appreciate your assistance.

[The following was received for the record:]

A PRELIMINARY NOTE ON MIGRATORY TENDENCIES AND DISTRIBUTIONAL PATTERNS OF ATLANTIC BLUEFIN TUNA BASED ON RECENTLY ACQUIRED AND CUMULATIVE TAGGING RESULTS BY FRANK J. MATHER III

SUMMARY

Important recent tagging results justify renewed consideration of migratory tendencies and distributional patterns of Atlantic bluefin tuna. Most recent returns confirm or expand previously deduced separate migratory patterns for bluefin tuna in the eastern and western Atlantic. Only nine tags recovered since 1970 indicate transatlantic mixing.

INTRODUCTION

Important progress has been made in tagging Atlantic bluefin tuna (*Thunnus thynnus thynnus*) but I have not attempted to summarize their distribution, migrations and populations on a comprehensive basis since 1973 (Mather, Mason and Jones, 1974). In this note I shall briefly review the transatlantic movements and the migratory tendencies which have emerged for bluefin of various size groups (Rivas, 1979) on the respective sides of the Atlantic. Migratory and distributional patterns in the Mediterranean Sea are not included.

TRANSATLANTIC MIXING

All but one of the transatlantic movements recorded by tag returns fall into two distinct geographical and seasonal patterns, one for individuals which were small when tagged and the other for giants. These patterns will be considered separately, according to size of fish.

Forty-five west-east and two east-west transatlantic crossings of small (3–44 kg when released) bluefin have been revealed by tag returns or recoveries (FAO, 1972;

Aloncle, 1973; Tyler *et al.*, 1979; SEFC, 1979; and one unpublished recently acquired tag return). Most of these movements have been described and discussed in detail by Mather, Bartlett and Beckett (1967); Mather (1969); FAO (1972); and Mather, Mason and Jones, (1974). All of the crossings were between two specific areas, the New York or Middle Atlantic Bight (Cape Hatteras to Cape Cod) and the Bay of Biscay. These are the most important known nursery areas for small bluefin, and also the sites of the most important fisheries for these fish, on the respective sides of the Atlantic. All of the west-east migrants were tagged in July or August. All but two sizes equivalent to ages I or II when tagged; one was probably age III and another IV. Most of the recaptures also occurred in July or August, with a few taking place in June, September or October. Excepting the two oldest fish, and those which had been at liberty for more than one year, the recaptures occurred at ages II and III. The two east-west migrants were released in September at ages I and II, and recaptured in July and August at age III. These data indicate that these crossings occurred during the cool period between fishing seasons, and that the tendency to make such movements was the strongest in fish of ages I and II.

The proportion of the tag returns indicating transatlantic migrations to those indicating recaptures on the side of the Atlantic on which the fish was tagged is indicated in Figure 1 for the United States western Atlantic releases, and in the following approximate figures all taggings for both sides of the ocean.

RELEASES OF AND RETURNS FROM SMALL BLUEFIN TAGGED IN THE ATLANTIC OCEAN

Area	Releases	Returns	
		Local	Transatlantic
Western Atlantic.....	17,822	2,050	45
Eastern Atlantic.....	447	6	2

"Local" returns refer to any returns from the side of the ocean in which the fish was released, but returns from fish which had been at liberty for less than six months were disregarded. These figures include releases through 1978 on both sides of the Atlantic and returns obtained up to October 25, 1979 in the western Atlantic and through October, 1978 in the eastern Atlantic.

For fish tagged in the western Atlantic, the proportion of transatlantic to local recaptures is very small, about 1 to 45. The proportion of transatlantic to local returns for eastern Atlantic taggings is one to three. More tagging results are needed to obtain a statistically significant figure for the eastern Atlantic.

The transatlantic movements of tagged small bluefin are not randomly distributed over the years. The two east-west migrations occurred either in a single year or in two consecutive years. The west-east crossings (Figure 1) could have occurred in a minimum of six, and a maximum of 10, of the 25 migratory periods which have occurred since tagging was initiated. All but two of the movements fell into two periods: 1965-1970 and 1976-1979. Thirty-eight of the 45 small bluefin known to have crossed the Atlantic from west to east were of the year classes of 1963 (four fish), 1964 (23 fish) and 1965 (11 fish). Two of the remaining seven were of the 1952 year class, two (including one assigned tentatively) of the class of 1973, two of the class of 1975, and one of the class of 1977. Rodewald (1967) suggested that transatlantic crossings were more apt to occur in years in which the westerly winds during the migratory period were exceptionally strong over the probable migratory paths. In any case, these movements do not appear to occur on a regular basis, or to involve the majority of the young bluefin in the western Atlantic when they do take place.

Ten west-east transatlantic movements of large (nine giant, one which was a very large medium when tagged) bluefin have been recorded by tag returns. Nine of these were from the Straits of Florida, off the northwestern Bahamas, to Norwegian waters (Mather, 1962; 1969; FAO, 1972; Mather, Mason and Jones, 1974; Mason, Mather and Baglin, 1977). All of these fish were tagged in May or June and recaptured in August, September or October. Four of these fish were recaptured in the year of their release, after periods of from 50 to 120 days at liberty. These returns establish the typical migratory period as May-June to August-October. Approximately 1,127 giant bluefin have been tagged in the vicinity of the Bahamas, and, in addition to the above returns, six have been recaptured in the western North Atlantic, including the Gulf of Mexico, and to in the western South Atlantic (see above references and Baglin, Mason, Mather and Freeman, 1978). Five of the nine transatlantic crossings from the Bahamas to Norway were concentrated in the

years 1960-1962. The remaining four were scattered over a nine-year period from 1967-1976. The abnormally thin condition of the migrants which were examined when recaptured in Norway was noticeable in contrast to the seasonally fat condition of the local fish (personal communication, J. Hamre, Fiskeridirektoratets, Bergen). Tiews (1964), using historical body condition data, estimated the annual recruitment of giant bluefin from American waters to the late season North Sea catches for the years 1952-1962. His estimates varied greatly, from 0 in some years to maxima of 39 percent in 1953 and 33 percent in 1961 with an average of 12 percent. In the latter year at least two, and possibly four, giant tuna which had been tagged in the Bahamas arrived in Norwegian waters. Rodewald (1967) showed possible relationships between these migrations and years when the west winds over the probable migratory route were abnormally strong during the migratory period.

Approximately 468 bluefin, mostly of medium size, have been tagged in oceanic waters north of latitude 35°N and west of longitude 60°W; 9 of these have been recaptured in North American coastal waters or at the edge of the continental shelf (FAO, 1972) and one was recaptured at Barbate (southern Atlantic coast of Spain) after more than 13 years at liberty (unpublished recently acquired tag return). This return represents the first migration of bluefin from the western Atlantic to the waters off southern Spain. It is also the first known transatlantic movement of such a large (estimated 275 lbs. 125 kg) bluefin tagged in an area other than the Straits of Florida. This fish was approaching giant size when tagged, however, and had been at liberty for 13 years when recaptured. Thus, it must have been a giant during most of this period. It could well have crossed the Atlantic as a giant, following the Bahamas-Norway route described above. Movements of large bluefin from Norwegian to southern Spanish waters have been traced by Hamre (1965). Thus, this individual might have followed a new route, or could well have followed routes already known to us.

Some 99 of about 2,468 giant bluefin tagged in Canadian and United States coastal waters have been recaptured in fishing seasons or fishing areas other than those in which they were tagged (see above sources, also Hurley, Burnett and Dickson, 1979; personal communication, B. E. Freeman, NMFS). All of these recaptures occurred in western Atlantic waters, including the Gulf of Mexico and the Caribbean Sea. Not one of these fish was recaptured in the eastern Atlantic.

Similarly, 31 of 555 medium and giant bluefin tagged in Norwegian (Hamre, 1965) and Spanish waters, (Rodríguez-Roda, 1969) have been recaptured in European waters, excluding those recaptured in the same fishing area and fishing season in which they were released.

The following approximate figures recapitulate the taggings and returns of medium and giant bluefin on the two sides of the Atlantic:

TAGGINGS AND RETURNS OF MEDIUM AND GIANT BLUEFIN IN THE ATLANTIC

Area	Releases	Returns	
		Local	Transatlantic
Western Atlantic	4,061	116	10
Eastern Atlantic.....	555	31	0

It is notable that not one of the numerous medium and large bluefin tagged in continental coastal waters has been captured on the opposite side of the Atlantic. One of many possible explanations for the transatlantic movements of bluefin released in the Straits of Florida and offshore waters also adjacent to the Gulf Stream may be the known (Sella, 1929; Sarà, 1973) tendency of migrating bluefin to follow ocean currents. This explanation is in accord with the hypothesis of Rodewald (1967). In any case, as with the small individuals, the numbers of known transatlantic crossings of medium and large bluefin are small compared with the number of local recaptures.

LOCAL MIGRATORY PATTERNS

Continued tagging effort is producing important new information on migrations of bluefin in the western Atlantic, but progress in the eastern Atlantic has been limited because it no longer seems feasible to tag medium and large bluefin there.

Since the availability of medium bluefin has been low, most of the recent tagging in the western Atlantic has been of small and giant fish. Some of the former, however, have been recaptured after attaining medium or giant size. The data

accumulated since 1954 provide considerable insights into the migratory patterns of the various size groups in the western Atlantic. It seems obvious, although still unconfirmed by tag returns, that age 0 bluefin perform fairly long migrations from their birth places in the Gulf of Mexico and the Straits of Florida (Richards, 1976) and probably from other spawning areas, to concentrate in or near the Middle Atlantic Bight (Cape Hatteras to Cape Cod) for feeding during their second summer of life. Until they reach maturity (about age V, Baglin, 1976) they alternate between this summer feeding area and a newly identified wintering ground on the continental slope off the New York Bight and Georges Bank. This area has been at least partially defined by numerous recaptures in December, January and February of small or medium bluefin which had been tagged in the coastal feeding area during previous summers (Mason, Mather and Baglin, 1977; Baglin, Mason, Mather and Freeman, 1978). Numerous returns show recruitment of small bluefin from the Middle Atlantic Bight to the fisheries for larger bluefin in the Gulf of Maine, even after as many as 13 or 14 years at liberty (unpublished recently acquired tag returns). Some of these fish have also, as noted above, been recruited to the Japanese winter longline fishery. One, after six years at liberty, was taken in the summer longline fishery south of the Grand Banks. Finally, two small bluefin tagged at ages I and II in the Middle Atlantic Bight during the summer of 1966 were recaptured eight to ten years later as giants in or near the spring spawning grounds (Richards, 1976). One was recaptured in the Gulf of Mexico in April, 1976 (Baglin, Mason, Mather and Freeman, 1978). The other was recaptured south of eastern Cuba in April, 1975, but the tag was not returned until November, 1979 (unpublished data).

There has been less tagging of medium bluefin, but offshore releases resulted in seven recaptures of mediums in the coastal summer fisheries for small and medium bluefin in the Middle Atlantic Bight and the Gulf of Maine. Two others have been recaptured in the western Atlantic, one at the edge of continental shelf south of Cape Cod, and the other, after more than seven years at liberty, as giant in the sport fishery near Yarmouth, Nova Scotia (FAO, 1972).

The migrations of giant bluefin have been even more extensive. Four giants tagged off the northwestern Bahamas in May or June have been recaptured in April, June, and July off the coasts of the northeastern United States and Canada. These fish were in, or presumably en route to, their summer feeding areas. Two other giant bluefin released in the Florida Straits in the same season have been recaptured in the Gulf of Mexico in March and April. Two others have been recaptured in the western South Atlantic, off Recife, Brazil, in March, and off Buenos Aires, Argentina, in February (Mather, 1969). Five giant bluefin tagged in Massachusetts and Cape Cod Bays in July or August have been recaptured in the Gulf of Mexico in March, April or May (Baglin, Mason, Mather and Freeman, 1978; personal communication, B. E. Freeman, NMFS). In addition, two giant bluefin tagged in St. Margarets Bay, Nova Scotia, in June and one tagged in Chaleur Bay, New Brunswick, in August have been recaptured in the Gulf of Mexico in March and April (Hurley, Burnett and Dickson, 1979).

These results and distributional data indicate that, for a large part at least, bluefin spawned in the western Atlantic tend to follow rather well-defined distributional patterns, according to size of fish (Rivas, 1979):

Age zero fish (< 3 kg.).—Concentration in the Middle Atlantic Bight during or soon after the end of their first year of life.

Small fish (3–44 kg.).—Seasonal movements between warm season coastal feeding area in Middle Atlantic Bight to oceanic wintering area over adjacent continental slope. In some years, large contingents of these fish cross the Atlantic to the Bay of Biscay during the cool season.

Medium fish (45–130 kg.).—Similar seasonal movements, but sometimes extending northward into Gulf of Maine and Nova Scotia waters in summer and fall, and extending much farther east between the Gulf Stream and the Nova Scotia and Grand Banks in winter. Spawning probably occurs in spring in or close to the Gulf Stream.

Giant fish (>130 kg.).—Much more extensive movements. Summer-fall feeding range extends from New Jersey to the Gulf of St. Lawrence and Newfoundland. Winter habitat is extremely large, extending from Bermuda to the Equatorial Current and sometimes beyond. Spring spawning concentration occurs in the Gulf of Mexico, and, probably, adjacent parts of the Caribbean and the Atlantic. Northward spring migration in May and June through the Straits of Florida and in Atlantic waters east of the Bahamas. The usual destination of these fish probably is the summer feeding area off New England and Canada, but in some years important contingents go to Norwegian waters instead.

Distributional patterns of bluefin tuna in the eastern Atlantic appear to be similar to, but more complex than, those in the western Atlantic. Since less tagging has been done in the former area than the latter, distributional data are more important in defining these patterns. There are indications that bluefin tuna spawned in the Mediterranean in spring and early summer move out through the Straits of Gibraltar to the Atlantic coast of Morocco in the fall (Mather, Mason and Jones, 1974; Rey, 1978MS). Age 0 bluefin are present in the latter area through the winter, and move closer to the coast in spring (Furnestin and Dardignac, 1962; Aloncle, 1964). Tagging, mostly of age I fish, off the Atlantic Moroccan coast in late spring and summer, has revealed movements southward along this coast in summer, and northward, bringing the fish to the coast of Portugal in late fall and into the Bay of Biscay in subsequent summers (Lambeouf, 1975; Brêthes; 1979). A small bluefin released off the southwestern Portuguese coast in June was recaptured in the Bay of Biscay in August (Aloncle, 1973). Two summer concentrations of small bluefin occur in the eastern Atlantic. The most important is in the Bay of Biscay, but these fish also occur in considerable quantities at the same time off the central coast of Morocco. The wintering area for small bluefin in the eastern Atlantic is not known, but may be, at least in part, between the Canary Islands and Morocco (Aloncle, 1964).

Medium bluefin formerly occurred in quantity off the southern coast of Norway in summer and early fall, but have been rare in that area since 1962 (Hamre, 1971). Their presence in mid-summer in the Bay of Biscay since 1971 has been documented (Bard and Cort, 1976). The lack of earlier research in that area leaves it unclear whether their occurrence in quantity there was continuous, or represented a shift of habitat from southern Norwegian waters. Long-line fishing extended knowledge of their occurrence in or near the Bay of Biscay and the Ibero-Moroccan Bay to spring (Shingu and Hisada, 1976; 1977; 1978). The Portuguese and Spanish trap fisheries, although mainly dependent on large bluefin, took fair quantities of medium fish in some years (Vilela and Cadima, 1961; Lozano Cabo, 1958; Rodriguez-Roda, 1964). Tagging near Cadiz, Spain, of two mediums in May and one in August (Rodriguez-Roda, 1969) revealed movements from there into various parts of the western Mediterranean. The recaptures occurred after periods of less than three months at liberty.

The distribution of giant bluefin in the eastern Atlantic, as far as can be determined by catch records, also changed drastically during the 1960's. These fish were formerly taken in considerable quantities in the Ibero-Moroccan Bay. The Portuguese and Spanish traps harvested both the "arrival" (pre-spawning) run in May and June and the "return" (postspawning) run in July and August. These fisheries have declined to the verge of extinction (Mather, Mason and Jones, 1974). Longline fisheries, however, have taken considerable catches of giant bluefin in the Ibero-Moroccan Bay and its approaches in winter and spring (Shingu and Hisada, 1976; 1977; 1978).

Some giant bluefin are taken in the Bay of Biscay in mid summer (Bard, Bessene-ton, Cendrero and Dao, 1973), but the larger contingents probably move west of the British Isles, then northward and eastward into north European waters (Le Gall, 1927; 1929; Hamre, 1971).

Giant bluefin formerly occurred in quantity in summer off the coast of Norway north of Bergen, and in the North Sea in late summer and fall. Since 1962, they have practically abandoned these habitats. They have changed their Norwegian summer feeding grounds from the waters north of Bergen to those south of there, which formerly had been occupied by the medium fish (Hamre, 1971). The bluefin tuna fishery in the North Sea has disappeared due to the lack of fish (Tiews, 1975).

Six giant or large medium bluefin tagged in Norwegian waters have been recaptured in spring off the southern Atlantic coast of Spain (Hamre, 1965). One giant tagged in the latter area in June was recaptured just inside the Mediterranean in the subsequent July (Rodriguez-Roda, 1969). Sella (1929) and Sara (1973) hypothesized massive migrations of giant bluefin from the Atlantic into the Mediterranean in May-June (prespawning) and back into the Atlantic in July-August (post-spawning).

Little is known about the winter distribution of giant bluefin. Some have been taken in that season around the Canary Islands (Santos, 1976; 1977). Longline catch data (Shingu and Hisada, 1976; 1977; 1978) show scattered winter catches from a considerable area approximately centered on those islands.

A conjectural and possibly over-simplified distributional pattern for bluefin in the eastern Atlantic is as follows:

Age zero fish (< 3 kg).—Concentration (probably including contingents spawned in the Mediterranean) off the Atlantic coast of Morocco in fall, remaining offshore in winter, and approaching the coast in spring.

Small fish (3-44 kg).—Southward movement along Moroccan coast in second summer, but some fish occur in Bay of Biscay and Ibero-Moroccan Bay. Northward movement from Morocco late in second summer of life, with minor concentration off Portugal in fall. Major concentration in Bay of Biscay in third summer, with lesser concentration off central Moroccan coast at same time. Seasonal movements between these summer feeding areas and wintering area which is possibly between Canary Islands and Morocco. This pattern, with variations, may be repeated until medium size is attained.

Medium fish (45-130 kg).—(Patterns after 1962.) Spring occurrence in approaches to Ibero-Moroccan Bay, where contingents may sporadically join the "arrival" (May-June) and "return" (July-August) runs of giants into and out of the Mediterranean, possibly spawning there. Others probably spawn in the Atlantic, but the area is uncertain. Summer occurrences in the Bay of Biscay and off the central coast of Morocco. Wintering area: little known, may center around Canary Islands.

Giant bluefin (< 130 kg).—(Patterns after 1962.) Spring occurrence in approaches to Ibero-Moroccan Bay. "Arrival" (May-June) run along shores of Ibero-Moroccan Bay and into Mediterranean. Spawning mainly in Mediterranean June-July. "Return" (July-August) run out of Mediterranean and westward along southern coasts of Spain and Portugal and then northward. Some fish occur in summer in Bay of Biscay but larger contingent passes west of British Isles and summers off the coast of Norway south of Bergen. Little is known of fall migrations and wintering area, which is probably very extensive.

CONCLUSIONS

Partly hypothetical distributional patterns and local and transatlantic movements of tagged bluefin tuna have been presented. The patterns and migratory tendencies could be clarified greatly by additional tagging, particularly in the eastern Atlantic, and by the study of catch and size composition data of oceanic fisheries on finer temporal and spatial parameters than are presently available. One major deficiency is in knowledge of how age 0 fish are recruited to the small fish fisheries. Pending the application of new techniques, it seems that this can only be accomplished by tagging age 0 fish as close to the time and place of spawning as possible. More complete knowledge of spawning areas and seasons is also required.

The patterns for eastern and western Atlantic bluefin have some basic similarities, especially if the Caribbean Sea and the Gulf of Mexico are thought of as the "American Mediterranean" as suggested by Sverdrup, Johnson and Fleming (1942). Each pattern is a reasonably self contained unit, but the winter ranges of the giant fish very probably overlap.

Transatlantic mixing has been indicated, but not quantified, by tag returns. The west-east movement of small bluefin are sufficiently numerous, however, to permit some tentative deductions. The known movements have not been randomly distributed among years, or among year classes of fish. Small bluefin have been tagged in the western Atlantic in every year since 1953, but 31 of the 45 recorded crossings were made in the period 1965-1967. More strikingly, 38 of the 45 crossings were made by fish of three consecutive year classes, those of 1963 (four fish), 1964 (23 fish) and 1965 (11 fish). Since the usual seasonal movements of small bluefin are apparently much less extensive than those of medium and giant fish, it would seem that some unusual stimulus must trigger these mass movements. They may represent and extension of apparently normal eastward movement from the warm season coastal feeding area to the wintering area over the continental slope.

The east-west transatlantic movement of giant bluefin whose times can be determined have taken place in the warm season (late spring, summer and early fall) when these fish would normally be feeding heavily in coastal waters. The lack of feeding opportunity while crossing the ocean results in the lean appearance which has been noted on their recapture off Norway. Two transatlantic migrants which were recaptured off Norway about 30 months after they had been released off the Bahamas were in the same fat condition as the local fish (Mather, 1969). This indicated that these fish had not crossed the Atlantic in the summer of their demise, but had crossed in a previous summer and taken up the life style of the bluefin in the eastern Atlantic. All of this, and the concentration of five of the nine transatlantic returns in the three year period 1960-1962, show that these crossings are not part of an annually repeated migratory cycle, but are irregular occurrences which involve greatly varying numbers of fish in different years. Tiews' (1964) studies of recruitment of giant bluefin from the western Atlantic into the German North Sea fishery in the years 1952-1962 bear this out. They show variations in recruitment from 0 to 39 percent. It seems very likely that these migrations are influenced by the Gulf Stream system. Migrating bluefin tend to follow favoring currents (Sella, 1929; Sara, 1973). All of the large bluefin known to have crossed the

Atlantic including nine giants released in the Straits of Florida and a medium tagged 400 miles east of Virginia, were tagged in or close to the Gulf Stream system. Not one of the many large bluefin tagged in American or European coastal waters is known to have crossed the Atlantic. It is rather surprising that no giant bluefin are known to have crossed the Atlantic during the winter, when the distributions of the larger fish in the eastern and western Atlantic probably overlap. If the hypothesis of Gulf Stream influence on west-east transatlantic movement of giant bluefin is correct, the most probable route for east-west migrations would follow the North Equatorial Current system. If such migrations do not occur, intermittent losses of giant bluefin from the western Atlantic to the eastern Atlantic would seem inevitable. The balance of west-east and east-west migrations of small bluefin cannot be estimated until more information is gained by tagging or other means. Present indications from tagging are that the great majority of the Atlantic bluefin remain on one side of the Atlantic or the other.

LITERATURE CITED

- Aloncle, H. 1964. Note sur le thon rouge de la Baie Ibéro-Marocaine. Bull. Inst. Pêches Marit. Maorc, 12: 43-59.
- Aloncle, H. 1973. Marguages de thons rouges dans le Golfe de Gascogne. ICCAT Coll. Vol. Sci. Papers, 1: 445-458.
- Baglin, R. E., Jr. 1976. A preliminary study of the gonadal development and fecundity of western Atlantic bluefin tuna. ICCAT Coll. Vol. Sci. Papers, 5(2): 279-289.
- Baglin, R. E., J. M. Mason, F. J. Mather and B. E. Freeman. 1978. Update on United States Atlantic bluefin tuna tagging. ICCAT Coll. Vol. Sci. Papers, 7(2): 322-328.
- Bard, F. X., C. Bessineton, O. Cendrero and J. C. Dao. 1973. La pêche de thon rouge du Golfe de Gascogne—résultat des recherches 1972. ICCAT Coll. Vol. Sci. Papers, 1: 397-412.
- Bard, F. X. and J. L. Cort. 1979. Etat de la pêche Franco-Espagnole de thon rouge (*Thunnus thynnus*) du Golfe de Gascogne (1972-78). ICCAT Coll. Vol. Sci. Papers, 8(2): 317-323.
- Brêthes, J. C. 1979. Sur les premières récupérations de thon rouges marqués en juillet 1977 au large du Maroc. ICCAT Coll. Vol. Sci. Papers, 8(2): 367-369.
- FAO, 1972. Final Report of the working party on tuna and billfish tagging in the Atlantic and adjacent seas. Supplement 1 to FAO Fish. Rep. No. 118: 1-37.
- Furnestin, J. and J. Dardignac. 1962. Le thon rouge du Maroc Atlantique (*Thunnus thynnus* Linné). Rev. Trav. Inst. Pêches Marit. 26(4): 381-398.
- Hamre, J. 1965. The Norwegian tuna investigations, 1962-1963. Ann. Biol. ICES, 20: 232-236.
- Hamre, J. 1971. Review of the bluefin tuna fisheries and research in Norwegian coastal waters and adjacent seas. FAO Panel of Experts for the Facilitation of Tuna Research, Fourth Session, La Jolla, California, U.S.A., 8-12 November 1971. EPFTR/71/Inf. 20: 1-3.
- Hurley, P. C. F., C. D. Burnett and C. A. Dickson. 1979. An update of Canadian large pelagic fish tagging. ICCAT Coll. Vol. Sci. Papers, 8(2): 338-342.
- Lamboeuf, M. 1975. Contribution à la connaissance des migrations des thons rouges à partir du Maroc. ICCAT Coll. Vol. Sci. Papers, 4: 141-144.
- Le Gall, J. 1927. Contribution à l'étude de la biologie du thon rouge (*Thunnus thynnus* L.) Sur la présence de thons rouges en Mer du Nord et dans l'Atlantique nord-est. J. Cons. 2(3): 309-331.
- Le Gall, J. 1929. Le thon rouge (*Thunnus thynnus* L.) en Mer du Nord et dans l'Atlantique nord-est. J. Cons. 4(2): 200-206.
- Lozano Cabo, F. 1958. Los escómbridos de las aguas españolas y marroquies y su pesca. Primera Parte. Trab. Inst. Esp. Oceanogr. 25: 1-254.
- Mason, J. M., Jr., F. J. Mather, III and R. E. Baglin, Jr. 1977. Results of United States cooperative tagging of bluefin tuna, October 1975 through October 1976. ICCAT Coll. Vol. Sci. Papers, 6(2): 259-263.
- Mather, F. J., III. 1962. Transatlantic migration of two large bluefin tuna. J. Cons. 27: 325-327.
- Mather, F. J., III. 1969. Long distance migrations of tunas and marlins. Underwater Naturalist, Bull. Amer. Litt. Soc., 6(2): 6-14, 46.
- Mather, F. J., III, M. R. Bartlett, and J. S. Beckett. 1967. Trans-atlantic migrations of young bluefin tuna. J. Fish. Res. Bd. Canada, 24(9): 1991-1997.
- Mather, F. J., III, J. M. Mason and A. C. Jones. 1974. Distribution, fisheries and life history data relevant to identification of Atlantic bluefin tuna stocks. ICCAT Coll. Vol. Sci. Papers, 2: 234-258.

Rey, J. C. 1978 Ms. Interrelacion de las poblaciones de atun rojo (*Thunnus thynnus* L.) entre el Atlantico y el Mediterraneo. Doc. 14, Colloque sur la Biologie, la Pêche et l'Aquaculture des thons en Mediterranee.

Richards, W. J. 1976. Spawning of bluefin tuna (*Thunnus thynnus*) in the Atlantic Ocean and adjacent Seas. ICCAT Coll. Vol. Sci. Papers, 5(2): 267-278.

Rivas, L. R. 1979. Proposed terminology for size groups of North Atlantic bluefin tuna (*Thunnus thynnus*). ICCAT Coll. Vol. Sci. Papers, 8(2): 441-446.

Rodewald, M. 1967. Transatlantic migrations of the bluefin tuna and anomalies of the atmospheric circulation. ICES C.M. 1967/J:7. Pelagic Fish (Southern) Committee: 1-7.

Rodríguez-Roda, J. 1964. Biología del atún, *Thunnus thynnus* (L.) de la costa sudatlantica de España. Invest. Pesqu. 25: 33-146.

Rodríguez-Roda, J. 1969. Resultados de nuestras marcaciones de atunes en el Golfo de Cadiz durante los años 1960 a 1967. Publ. Tecn. Juanta Estud. Pesca, Subsec. Marina Mercante, Madrid, 8: 153-158.

Santos Guerra, A. 1976. La pesca del atun rojo (*Thunnus thynnus* L.) en Canarias: resultados preliminares (Enero-Octubre 1975). ICCAT Coll. Vol. Sci., Papers 5(2): 242-243.

Santos Guerra, A. 1977. Resultados preliminares de las pesquerías canarias de tunidas en 1976.

Sarà, R. 1969. La pesca del tonno in Tirreno nel 1969. Boll. Pesca, Piscic., Idrobiol. 24(n.s.): 159-164.

Sella, M. 1929. Migrazioni e habitat del tonno (*Thunnus thynnus* L.) studiati col metodo degli ami, con osservazioni su l'accrescimento, sul regime delle tonnare ecc. R. Comit. Talass. Ital. Mem. 156: 24 pp.

Shingu, C. and K. Hisada, 1976. Stock assessment and utilization of medium and large sized bluefin tuna in the Atlantic Ocean. ICCAT Coll. Vol. Sci. Papers, 5(2): 332-336.

Shingu, C. 1977. A review of the Japanese Atlantic longline fishery for bluefin tuna and the consideration of the present status of the stock. ICCAT Coll. Vol. Sci. Papers, 6(2): 366-384.

Shingu, C. 1978. Recent status of the medium and large bluefin tuna population in the Atlantic Ocean. ICCAT Coll. Vol. Sci. Papers, 7(2): 266-275.

Southeast Fisheries Center. 1979. Status report Atlantic bluefin tuna October 16, 1979.

Sverdrup, H. U., M. W. Johnson and R. H. Fleming. 1942. The oceans, their physics, chemistry, and general biology. Prentice-Hall, Inc., New York. 1060 pp.

Tiews, K. 1964. Der thunbestand (*Thunnus thynnus* (Linnaeus)) in der Nordsee, seine wanderungen, seine transatlantischen beziehungen und seine nutzung durch die deutsche fischerei. Arch. Fischereiwiss. 14(3): 105-148.

Tiews, K. 1975. On the disappearance of bluefin tuna in the North Sea and its ecological implications on North Sea fish stocks. ICES C.M. 1975/J:3. Pelagic Fish (Southern) Committee: 1-23.

Tyler, J. C., R. E. Baglin, M. I. Farber, F. H. Berry and L. R. Rivas. A review of the Southeast Fisheries Center biological and statistical research on the structure and status of Atlantic bluefin tuna stocks. ICCAT Coll. Vol. Sci. Papers, 8(2): 381-390.

Vilela, H. and E. Cadima. 1961. Etudes sur les thons, *Thunnus thynnus* (L.) de la côte Portugaise, Ann. Biol., ICES, 16: 241-245.

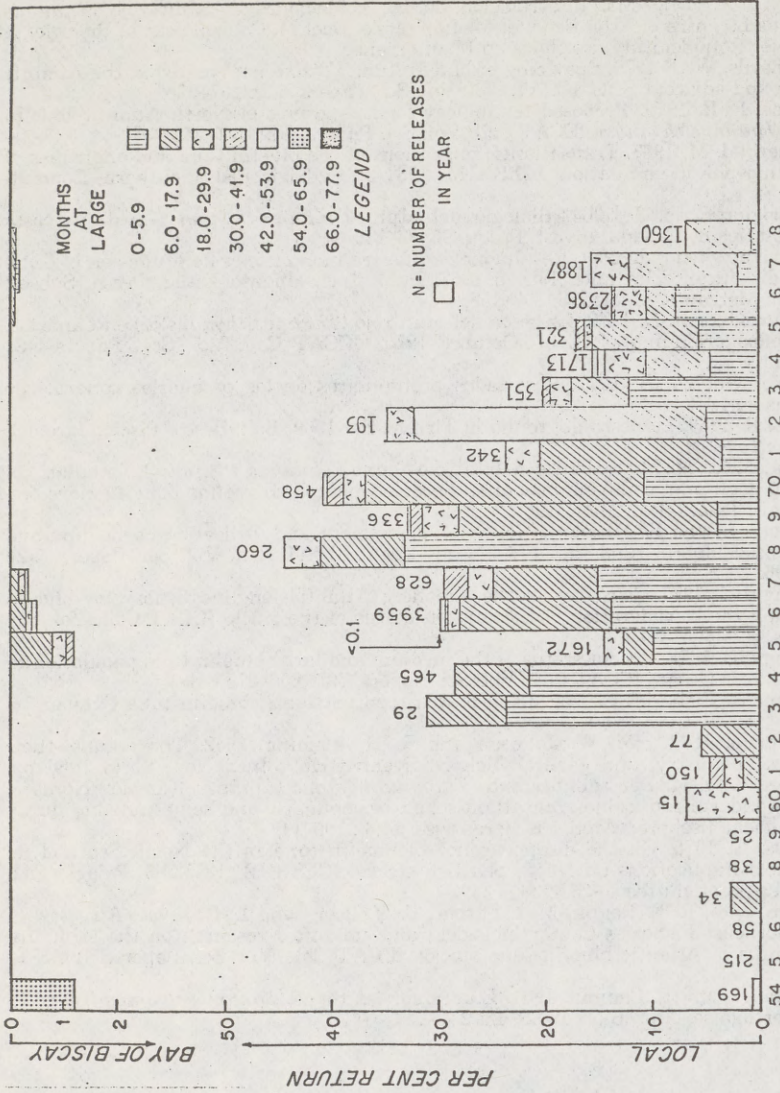


Fig. 1. Return rates (in percent of releases) from small bluefin tuna tagged in coastal waters between Cape Hatteras, North Carolina, and Cape Ann, Massachusetts, by year of release. Returns represented along lower margin were from the release area; those represented along upper margin (note larger vertical scale) were from the Bay of Biscay.

**STATEMENT OF ALAN MACNOW, TELE-PRESS ASSOCIATES,
PUBLIC RELATIONS COUNSEL TO THE JAPAN FISHERIES AS-
SOCIATION**

The CHAIRMAN. Our final witness is Mr. Alan Macnow, Tele-Press Associates, public relations counsel to the Japan Fisheries Association.

Mr. Macnow, your entire statement will be printed in the record at this point.

[The following was received for the record:]

**STATEMENT OF ALAN MACNOW, TELE-PRESS ASSOCIATES, PUBLIC RELATIONS
COUNSEL TO THE JAPAN FISHERIES ASSOCIATION**

Mr. Chairman and members of the committee, my firm is the public relations counsel to the Japan Fisheries Association.

Congressman Gerry Studds is proposing to attach an amendment to the ICCAT reauthorization bill which would place bluefin tuna under U.S. authority within the 200-mile Fishery Conservation Zone (FCZ). A careful study of this proposal, though, reveals that it would not provide for conservation of the species, but would open the door to heavy exploitation of the resource, exploitation which would be both detrimental to the resource and, ultimately, U.S. fisherman.

All species of tunas, along with most billfishes and sharks, are highly migratory and belong to no single country. This has been repeatedly stated by marine scientists. It has been repeatedly acknowledged at the United Nations Law of the Sea Conference, and by the formation, through international conventions, of a number of multi-nation commissions which regulate the fishing for tunas throughout the world. Some of these international commissions are the Inter-American Tropical Tuna Commission (IATTC), the International Convention for the Conservation of Atlantic Tunas (ICCAT), and the Indian Ocean Tuna Commission.

As the world's largest consumer of tuna, the United States has a compelling interest in both the conservation and utilization of this important food fish. For while the United States consumes 42 percent of the world's supply of tuna, its large and efficient tuna fleet can only harvest about 40 percent of the 1.5 billion pounds of tuna consumed annually by Americans. Some 900 million pounds of tuna had to be imported into the United States last year, at a cost of \$327 million, to satisfy American demand for this fish. Tuna accounts for 25 percent of total U.S. food fish consumption, and consumption of the fish increased by 14 percent between 1977 and 1978.

If the United States were to depend for its tuna supply on only these tunas found within 200 miles of its coasts, it would only be able to obtain between three to five percent of its needs. Moreover, as tuna accounts for one out of every four dollars earned by American fishermen for the catch of fin fish, the loss of foreign tuna fishing grounds would be a sharp blow to U.S. fishing income and employment.

Conversely, imports would have to increase, at a cost of nearly \$300 million added to the nation's trade deficit.

From a long term point of view, the problem of the United States is not only how to ensure access to the resources, but also how to prevent other countries, which see tuna only as a source of wealth, from depleting the stocks through intensive over-exploitation. Without effective international regulation of the catch, tunas will be forced to run a deadly gantlet through the 200-mile zones of country after country, each intent on maximizing its own catch. And those which swim outside of the coastal zones will find pelagic fleets waiting for them.

Unfortunately, the history of U.S. exploitation, until recent years, has not been a model for other countries to follow. Throughout the 1960's and into the 1970's, U.S. sports and commercial fishermen on the Atlantic coast took a heavy toll of juvenile bluefin tuna, allowing only a small percentage to survive to spawning age. Only after repeated warnings from the scientists of the many countries which make up ICCAT, and after it became clearly apparent that the stock was in deep trouble, did the United States finally agree to limit the catch of juveniles and prohibit the catch of the very young and the sexually maturing bluefins.

Happily, the United States last year again revised its regulations to take some of the pressure off of the juvenile bluefins, by switching fishing effort to the more abundant, and more profitable, giant bluefin tunas.

CAN INTERNATIONAL REGULATION BE EFFECTIVE?

A great deal of criticism has been leveled by Americans against international fisheries conservation commissions such as ICCAT. Most of it, I believe has been self-serving and unjustified.

It is true that international conservation commissions are often slow to react to overfishing, and often make unsatisfactory compromises in favor of the fishermen rather than the fish. However, the same can be said of many state and federal fisheries conservation efforts. The bottom line, though, is can any single nation do a better job? In regard to highly migratory species, I am afraid the answer is: "No."

ICCAT, for all its limitations, has done a fairly credible job in restraining the over-exploitation of bluefin tuna by recommending restrictions on catch or fishing efforts to levels no greater than those prevailing in 1974-75. It also has prohibited the catch of undersized tuna, not only for bluefins but for other species as well.

Americans involved in fishing for bluefin tunas have criticized ICCAT for recommending limitations at 1974-75 levels, though this originally was an American proposal. With the support of Canada, the U.S. ICCAT delegation tried to introduce a five-year averaging concept which, given the massive American catches of juvenile bluefins in 1970 and 1971, would have allowed the U.S. a higher take than at present. ICCAT, I believe, showed itself to be responsible by turning down this proposal.

Now, those who want to more heavily exploit bluefins are trying to convince this body that Atlantic bluefin tuna management should be divided into two management systems: one for the western side of the Atlantic and the other for the eastern. To support this contention, those people are trying to prove that Atlantic bluefins are divided into two stocks, an eastern stock and a western stock.

The scientists at NMFS and ICCAT so far have found no evidence to support this theory, especially in view of the fact that there is much evidence to support a one stock theory. This evidence includes the facts that: (1) bluefin tunas tagged in the United States have been recovered off Norway, the Bay of Biscay and other European coastal waters; (2) changes in abundance in the stocks appear almost simultaneously on both sides of the Atlantic; and (3) there appear to be no morphological differences in the fish on both sides of the Atlantic.

Added to this, only a few years ago scientists at the NMFS Miami Laboratory reported that while juvenile bluefins migrate up and down the North American coasts, about half of the giant bluefin tunas migrating up the coast from the Gulf of Mexico seemed to turn away past bimini and headed eastward into the open Atlantic. And of 17 giant bluefins recovered from tagging releases in the Bahamas, 9 were recovered off the coast of Norway, 2 off of South America and only 4 off the Atlantic coast of the U.S.

The only evidence I have seen to support a two-stock theory was based upon the contention that most tagged bluefins are caught by Americans or Canadians along the north American coast. These tag recoveries, however, were of small fish, which may confine their migrations to smaller areas. Significantly, however, two small bluefins tagged in 1977 off New England were recovered in the Bay of Biscay by French fishermen in 1978.

ARE BLUEFINS OVERFISHED?

In 1974, scientists from the 14 nations which then composed ICCAT were concerned that the annual catches of North Atlantic bluefin tuna had dropped from around 35,000 metric tons in the mid-1960's to around 13,000 MT in 1973. Of particular concern was the fact that cohort analysis indicated that there was very high fishing mortality on young fish, which appeared likely to severely affect the future size of spawning stocks. The prospect of a failure in the spawning stock alarmed everyone concerned with bluefin tunas, including conservationist groups.

This frightening prospect was compounded by the release in 1975 of a bluefin cohort analysis by Drs. Beardsley and Parks of the NMFS Miami Laboratory, which estimated that only about 9,000 giant bluefin tunas were left in the Atlantic.

Dr. Frank Mather of Woods Hole apparently used these data as the basis for a paper which predicted the extinction of bluefin tunas by 1985. As a result, the issue was picked up by conservation groups and made into a major campaign, alarming people far and wide over the plight of the bluefin tuna.

In the meantime, whole exaggerated reports of the plight of the bluefin tuna were being circulated, catch levels recovered and rose to 22,405 MT in 1974 and 25,758 MT in 1975. In 1976, ICCAT's conservation recommendations went into effect, but before they could be fully applied, catches totaled 26,715 MT. Further application of ICCAT's conservation recommendations reduced catches to 24,806 MT in 1977.

In November, 1977, the Scientific and Statistical Committee of ICCAT reported: "The apparent trend in decreasing recruitment up to 1972 has not been confirmed by later data, and there certainly has not been any recruitment failure."

In the same year, Japanese scientists reported that their latest analysis of bluefin tuna populations indicated that there were at least 150,000 to 250,000 giant bluefins in the Atlantic, or at least far more than the 9,000 that Beardsley and Parks had estimated. In 1978, an NMFS scientist, Dr. M. L. Parrack, confirmed this fact and estimated that the giant bluefin population in the Atlantic numbered from 200,000 to 400,000.

At present, ICCAT scientists are still cautious about the condition of the stocks, but there is general agreement that the conservation recommendations are having a positive effect upon escapement of the smaller fish for recruitment into the spawning stock.

The low recovery rate of tagged small bluefins may also suggest that a significant escapement is now taking place.

ARE BILLFISH OVERFISHED?

One of the arguments most frequently advanced for placing tuna under U.S. conservation authority is that such an action would stop foreign fishing for tuna in the FCZ, and with it their incidental catch of billfish.

I believe this argument is wrong on two counts. First, placing bluefin tuna under U.S. authority would not stop foreign fishing for tuna in the FCZ.

In the case of Congressman Studds' bill, fishing for other species of tuna would still be exempt from U.S. management authority.

As these species constitute about 75 percent of the Japanese fishermen's tuna catch in the FCZ, the effect on the incidental catch of billfish is likely to be minimal.

Billfish are just as highly migratory as tunas. The fact that they are currently under U.S. management authority has less to do with whether their conservation can be managed by a single nation than with the political power of the recreational fishermen who wanted to reserve these fish for their pleasure.

I think it is significant that the FCMA clearly states that: "The exclusive fishery management authority of the United States shall not include, nor shall it be construed to extend to, *highly migratory species of fish*." (Emphasis added.) Then, as a loophole in the Act for the benefit of the recreational fishing lobby, "Highly migratory species of fish" is defined only as tuna.

The fact is that 85 percent of the billfish caught in the North Atlantic are caught outside of the FCZ. So whether the catch of billfish inside the FCZ is increased or decreased will have little effect upon the stocks. Conservation, therefore, is irrelevant to the management plan. The real reason for the existence of a management plan is exploitation—American exploitation—of the billfish resources. The recreational fishing lobbies wanted to "enhance the recreational experience of American sports fishermen" by maximizing the number of billfish available to American fishermen. And they got what they wanted.

Under the current management plan, foreign tuna fishermen in the FCZ are not allowed to retain any billfish accidentally hooked while fishing for tuna. They must cut the billfish loose at the waterline with a minimum of injury, even if the billfish are dead when brought alongside the fishing vessel.

Speaking for myself, I am of two minds about this. On the one hand, I believe that American recreational fishermen should have the opportunity to catch as much fish as they can use, consistent with conservation requirements. On the other hand, I hate to see fish wasted when they can be utilized by somebody for food. I am in favor of cutting loose a live fish so that another fisherman can enjoy the experience of catching a billfish. But the requirement to cut loose a dead fish is a terrible waste in this protein-short age.

I think that there is no doubt that the Atlantic billfish management plan has succeeded in providing greater access to billfish in the FCZ to American recreational fishermen. Before the FCMA, during the period 1970 to 1974, an average of 6,000 billfish per year were caught in the Gulf of Mexico FCZ incidentally to the catch of tuna. In the one year since implementation of the Preliminary Management Plan, that mortality was reduced by 57 percent to only 2,630 fish. Last year the incidental catch of billfish was less than 2,000 fish.

Last year, in an effort to reduce billfish mortality even more, the Japanese tuna fishermen voluntarily changed their fishing strategy in the Gulf. As billfish mortality incidental to catching tuna is highest in the summer months when billfish are most abundant in the Gulf, the Japanese decided to complete their bluefish tuna fishing by the end of April instead of by the end of June, as in previous years. They

also voluntarily reduced the number of their yellowfin tuna fishing vessels to five and limited their fishing to two months, June and July.

The effect of all this is that American recreational fishermen are being given greater access to the billfish which swim through the FCZ. The mortality of billfish resulting from foreign fishing for tuna last year amounted to less than 10 percent of the American Atlantic billfish catch. Excluding swordfish, it amounted to about 4 percent of the U.S. catch. Either way, it does not have significant impact upon either American recreational fishermen, or commercial swordfishermen, or upon the condition of the stocks.

MANAGEMENT DEMAND BASED ON EXPLOITATION, NOT CONSERVATION

In view of the fact that neither the Japanese catch of bluefin tuna in the FCZ, nor the incidental catch of billfish, can have any significant effect on the conservation of these species, why then the pressure to bring tunas under U.S. management authority?

The only real reason appears to be that some groups of American fishermen want those fish which the Japanese are now harvesting, particularly the giant bluefin tunas.

Bluefin tuna has become a big money fish. A recent study done for the Commonwealth of Massachusetts indicated that the sale of giant bluefin tunas is currently bringing Massachusetts fishermen about \$7 million a year. Each giant fish, sold to buyers for shipment to the Japanese market, can bring from \$1,500 to \$2,000.

That's why the East Coast fishermen, commercial and recreational fishermen alike, are chafing under U.S. catch limitations of only 3,500 fish.

There is really no limit on the number of giant bluefin tunas that can be caught by recreational fishermen. Recreational fishermen can catch as many as they like, providing the fish are tagged and released. But the big money offered for giant bluefin tunas has turned their catch by recreational fishermen from a sport into a business.

It is little wonder that these fishermen look at the Japanese catching 8,000 giant bluefins, and ask indignantly why these fish cannot be theirs. They think that if the Japanese were pushed out of the FCZ, they can then get these fish.

What they fail to realize, through, is that both the United States and Japan, as members of ICCAT, are under the same kind of conservation restraints. The United States is committed to keeping its bluefin tuna catches down to 1974-75 levels, as is Japan. So even if Japan were pushed out of the FCZ, the United States could not increase the quota for its fishermen without undermining the ICCAT conservation regime.

Last year the NMFS increased the quota for giant bluefin tunas by 1,000 fish. This was done, however, by reducing the quota on juvenile bluefin tunas, so that the full quota for both small and giant fish does not exceed the 2,200 short tons which were caught by American fishermen in the 1974-75 period.

If the United States were to place bluefin tuna under its management authority, and then were pressured into setting the allowable catch for domestic fishermen at levels equal to the current total giant bluefin catch by both Japanese and Americans, the U.S. catch would then greatly exceed ICCAT's recommendations and would violate ICCAT's conservation program. If the United States will not accept ICCAT's constraints, then it is hardly likely that other countries would either, and all will seek similar increases. This could easily lead to the dissolution of ICCAT and dangerous over-exploitation of the Atlantic bluefin tuna resources.

Another unforeseen consequence of undermining ICCAT would be the probable entry of countries such as Cuba, the Bahamas, Mexico and Venezuela into the giant bluefin fishery. ICCAT's injunctions against increasing the catch of bluefins so far have restrained these nations. But if these injunctions were violated, or if ICCAT fell apart, there would be no restraints. Cuba, the Bahamas, Mexico and Venezuela are just as eager to sell giant bluefins to Japan as the New England fishermen are, and unrestricted bluefin fishing by those countries could wipe out most of the migrating fish before they enter the FCZ.

THE SITUATION IS STABLE NOW, THERE IS NO NEED FOR A CHANGE

Currently, the Atlantic bluefin situation is stable. American fishermen are enjoying profitable returns from selling giant bluefin tunas to Japan, ICCAT's conservation regime is providing for the rebuilding of a bigger spawning stock, and Japan's tuna fishermen in the FCZ have developed a voluntary program to help maximize U.S. catches of bluefin tunas and billfish.

Under this voluntary program, the Japanese tuna industry reduced its catch of giant bluefins in the Gulf of Mexico from around 10,000 fish in 1976 to some 8,000

fish in 1978, 1979, and 1980, a 20 percent reduction. The number of tuna fishing vessels also were reduced from around 36 to no more than 24.

For 1980, the Japanese tuna industry voluntarily cut its fishing effort even more, by reducing the number of tuna vessels in the Gulf during June and July to only five vessels.

All of this was done to allow more bluefins and billfish to escape so that they could possibly be caught by Americans. In addition, the Japanese adopted a set of operational guidelines which call for their tuna vessels to avoid setting their fishing gear in areas which appear to have large concentrations of billfish. They will also avoid fishing near tournament areas when fishing tournaments are in progress.

Progress also is being made in providing for the escapement of small bluefins so that they can grow to replenish the spawning stocks. As noted earlier, the United States has proposed to reduce quotas on the small fish, of which from 30,000 to 80,000 were taken annually. It has been estimated that Canada annually takes about 30,000 of the small bluefins and Japan about 10,000 to 12,000.

ICCAT now is studying whether a conservation regime is needed for billfish. There is general agreement that ICCAT should be responsible for billfish as well as for tunas.

As for gear conflicts between the Japanese tuna fishermen and American commercial fishermen, action was taken on this front, too. Under their voluntary guidelines, which are to be adopted on July 1, the Japanese tuna fishermen agreed to stay at least one mile away from American fixed fishing gear at all times. This year, however, there were conflicts with Gulf of Mexico fishermen who stepped up their swordfishing in the same areas in which the Japanese were fishing for tuna. This was unexpected and neither side know how to cope with the situation. However, I have discussed the matter with both sides and believe an amicable accommodation can be worked out before next year's fishing season.

I do not believe that passage of legislation to bring tuna under U.S. management authority could substantially improve what is being done now to maximize American access to tuna and billfish, and provide for the conservation of the species. On the other hand, passage of such a bill would destroy international conservation efforts, encourage fishermen from Cuba and other countries to compete with Americans for this rich resource, and impair America's ability to obtain enough tuna to meet the needs of its consumers, canneries and tuna fishing fleet.

I hope that Congress in its wisdom will make the right decision and leave the tuna provision in the FCMA as it is.

Thank you for your consideration of these issues.

Mr. MACNOW. Thank you, Mr. Chairman, I will make this very brief. I know the hour is getting very late. My name is Alan Macnow. I am the public relations counsel for the Japan Fisheries Association.

[Mr. Anderson assumes the Chair.]

The statement that I have submitted carries most of the facts of the situation, including the fact that there was a significant scare over the abundance of bluefin tuna some years ago. As a result of that, ICCAT instituted conservation recommendations which are followed by Japan and all the other members of ICCAT.

Under these conservation recommendations the Japanese limit their catch of bluefin tuna in the North Atlantic to 4,500 metric tons, plus a 10 percent by-catch allowance. Their catch of bluefin tuna of 4,500 tons is from all over the North Atlantic.

I wasn't here before, but you might have seen charts which indicate the pattern of their fishing, and indicate just where their catches were made. This is data available to ICCAT and it has been charted, I think, in five-degree squares, and it indicates a pattern of migration of bluefin tuna which goes right across the Atlantic.

The Japanese were the ones who discovered the stock of giant bluefin tuna in the Gulf of Mexico. Before that it wasn't even known that bluefin tuna, giant bluefin tuna, came into the Gulf of Mexico. And the Japanese started to come in I think 1973, 1974.

Mr. ANDERSON. When did they discover it?

Mr. MACNOW. About 1973 or 1974. And they discovered that there were significant quantities there, and they set to harvesting them. There was no American fishery for bluefin tunas down there. An occasional bluefin, I think, was caught by sports fishermen. There was no commercial fishing for bluefin tuna.

It might interest you that the Japanese also, through their fishing around the world, have indicated that there is another area for spawning besides the Gulf of Mexico; and that is off the coast of Venezuela. And fish from the coast of Venezuela, they spawn there, the young apparently come up the coast—some of them go right across the Atlantic, others head in a southerly direction.

But the Gulf of Mexico is not the only spawning area; it is one spawning area.

And the Japanese have limited their catch in the Gulf of Mexico. In 1976 they were catching 10,000 of the giant fish there; by 1978 they had voluntarily agreed to lower their catch to 8,000 giant fish, and they have kept their catch at that level ever since.

This year they fished in the area from January to April 2. They reported that there was great abundance of giant bluefin in the Gulf of Mexico this year. Generally, they finish catching the 8,000 fish by the end of April or the 15th of May. This year they caught the 8,000 fish by April 2, fully a month earlier than they generally catch it. They are reporting a larger abundance of giant bluefin tuna. And this, I think, is reflected in the catch this year, in which the same number of fish were caught as were caught last year and the year before, but in 1 month's less time. The number of boats has remained the same; they have limited their vessels to no more than 24 in that fishery—they won't increase it. In the summertime they voluntarily agreed to limit the number of vessels to five in the Gulf of Mexico and to fish only for 2 months, only for June and July. They get out of the area right after July, and they are not in the Gulf of Mexico any time after that, even though there is still tuna there.

Bluefin tuna is not the only fish that they catch in the Gulf of Mexico in the winter fishery—that is, the January through April fishery. The last statistics I saw running January through the end of March, the Japanese had caught something like 24,000 fish of all types—tuna fish of all types. Of this, bluefin tuna at that point were almost 8,000. So that means, if my arithmetic is correct—and I don't think it is at this hour—about 14,000 of the fish were other types of tuna, like yellowfin, bigeye, and 8,000 of the fish were bluefin tunas.

The Japanese after they leave the Gulf of Mexico generally go down off the coast of Africa or South America and catch tunas. These vessels are out for 14 months from their home base. Then at the end of summer and the beginning of winter, they enter the North Atlantic fisheries, and they fish for tuna again off Georges Banks. Most of their catch is caught outside the 200-mile zone; some of it is caught inside the 200-mile zone, again talking of bluefin tunas.

Their catch in those areas is considerably less than about 3,000 tons in all the rest of the North Atlantic in that period.

The United States has set itself a quota, based on 1974-75 catch levels, and translated that into a number of the fish. This means

that American fishermen can catch 3,000 giant bluefin tunas—3,500, I believe that is, giant bluefin tunas, and the rest of the fish to fill out the quota are generally small tunas, school tunas. It is estimated that the U.S. fishermen catch 40,000 of the small tunas—these are 40,000 fish that if left alone would grow up to spawn and then to become the big giant tuna which are so valuable in the Japanese markets.

Japanese scientists a couple of years ago evaluated—they assessed the number of bluefin tunas in the North Atlantic. They came up with a figure of from 150,000 giants to about 200,000 giants. Japanese data was later reassessed by American scientists, who indicate there is something like 250,000 giant tuna in the Atlantic.

So, as you can see, the number of these giants that are being caught, if these assessments are correct, is a very small percentage of the population.

That's about all I would like to say about that.

I see in some of the testimony that went on before I got here that Mr. Frank Carlton, president of the National Coalition for Marine Conservation, had a statement here on page 13 in which he says "There is at present absolutely no provision under U.S. management for any, not one, giant tuna to be caught by U.S. fishermen in the Gulf of Mexico." That is an obviously incorrect statement.

Under U.S. Government regulations, even though there have been very few giant bluefin tunas caught by Americans in the Gulf of Mexico and in the South Atlantic fishery, there is a provision for 300 fish to be caught below Cape Cod, I believe it is, and that includes all the waters down to Florida and into the Gulf of Mexico. So there is some allowance.

Last week I attended a bluefin tuna hearing in Fort Pierce, Fla., and there some 40 very irate fishermen, belonging to the Southern Offshore Fishermen's Association. They were very irate because their share of the total allowable catch under U.S. regulations was so small, only 300 fish out of some 3,500 that are allocated. The people in New England get 3,200. The whole area I think south of Cape Cod, if that is the dividing point, gets about 300, including right down into the Gulf of Mexico.

I understood that those fishermen had reason to be very annoyed at the way the split was. But this is not something they can blame on the Japanese. This is the way it was set up under American regulation.

I do feel, and my clients in Japan feel, that the stock of bluefin tuna has been recovering since 1976, when ICCAT's recommendations were put into effect. From purely, I guess, anecdotal evidence at this point, the fact that these fishermen, Japanese fishermen, tell me that they caught their 8,000 fish in a very short period of time, and that the gulf is swarming with bluefin tunas, and the same reports from the members of the Southern Offshore Fishermen's Association, these American longline fishermen who were down there trying to get some of the bluefin tunas, but who were restricted by American regulations, which only allocated them 300 or less—this type of evidence, while not really scientific, indicates that there was a greater abundance of bluefin tunas down there this year. I think it would be important for scientists to catch up a

little bit with what's going on now. Most of their population estimates are at least based on last year's catch, and since for the last year their estimates are very inaccurate, the estimates actually reflect stock conditions 2 or 3 years ago. If the scientists here and in Japan would get together and come up with a better estimate which would possibly allow for an increase in the catch limits through ICCAT, this may very well be a means to insure Americans of getting the larger catch that the fishermen seem to want.

I don't know. I can't say, because I am not a scientist, whether the stock has increased. But I would like to point out to you this evidence from the fishermen, and indicate that it might be worthwhile to get a more updated stock assessment, and then try to work from there through ICCAT to increase the quotas for the American fishermen.

I think that my clients, who have tried very hard to accommodate American fishermen in all respects, including cutting down on the time and the number of vessels that they have in the 200-mile zone, might be willing to keep their catch at current levels and allow the American catch to increase through ICCAT. I would like very much to see if we could work out something like that.

I would like to answer any questions that you might have.

Mr. ANDERSON. Thank you, Mr. Macnow. As you know, Japan has shifted its bluefin tuna operations from the eastern Atlantic to the western Atlantic.

How many countries have objected to this shift in operations and what has been the reaction of Japan to such objections?

Mr. MACNOW. How many countries have objected?

Mr. ANDERSON. Yes.

Mr. MACNOW. The United States objected.

Mr. ANDERSON. Only the United States?

Mr. MACNOW. As far as I know. Canada, which generally follows the United States at ICCAT, might have put in the objection, but I don't know, I really don't.

Mr. ANDERSON. Do you believe there are one, two, or three stocks of bluefin tuna?

Mr. MACNOW. I believe there is one stock of bluefin tuna.

Mr. ANDERSON. The places that they spawn, then, are: Venezuela, the gulf and—

Mr. MACNOW. Well, that is what is known so far. There may be more places where they spawn.

Mr. ANDERSON. Do you believe the shift in Japan's operations from the eastern Atlantic has had an effect on the bluefin tuna stocks in the 200-mile zone in the United States?

Mr. MACNOW. No, sir, I do not. I don't think there is any evidence of that at all. As a matter of fact, there seems to be more of the young fish in the waters now; certainly from this past season's fishing there seem to be more of the older fish in the waters now than there were just a few years ago.

I think a very beneficial thing to the American fishery has been the fact that the fishing has shifted, the American fishing has shifted from the smaller fish to the larger fish, allowing greater escapement of the smaller fish to get to the breeding sizes. And that has had a beneficial effect on the stock.

Mr. ANDERSON. With a view toward trying to be cooperative in protecting and rebuilding the western Atlantic bluefin stock, do you think that Japan would agree either to refrain from taking any bluefin tuna for a year or two, or, to shift part of its operations back to the eastern Atlantic, or to reduce by half its recent level of harvest in the western Atlantic?

Mr. MACNOW. I think that without evidence that there is any reason to have a moratorium—and I don't think any evidence has been shown that stocks are in trouble or the fish are in trouble or that the stocks could be rebuilt at any faster rate with a moratorium, I am sure that the Japanese would be very reluctant to engage in a moratorium.

As for shifting effort back to the other side, I believe some of it has been shifted back, and I know some of it has been shifted—because they did lower their effort in the Gulf of Mexico, and they did shift effort.

Mr. ANDERSON. They didn't reduce their catch very much, did they? I think you said 10,000.

Mr. MACNOW. Well, it used to be 36 vessels in the fishery, now they have dropped it down to 24. There are other vessels which are not fishing there, are fishing again off the coast of Europe or South America, and the coast of Africa. They have shifted effort.

Mr. ANDERSON. I think the figures you gave, you said in 1976 it was 10,000—

Mr. MACNOW. Fish.

Mr. ANDERSON. In 1978 it was 8,000, and I understand in 1979 it was 9,000.

Mr. MACNOW. No, sir, it was 8,000. It's been 8,000 since 1978.

Mr. ANDERSON. I've been told there was 9,000 caught this year.

Mr. MACNOW. 9,000 caught this year? 1980? I was in Japan April 2 when we got the radio word that they were coming up on the 8,000th fish, and that they told me that they would leave—we got a Telex in—they would leave by April 2.

So I am not aware if they caught more than that.

Mr. ANDERSON. If Japan is unable to fish for bluefin tuna within our 200-mile fishery zone, what effect would that have on Japanese longline tuna operations and on the bluefin tuna stocks in general?

Mr. MACNOW. I don't think it would have any effect on the bluefin tuna stocks in general. If the United States declared a 200-mile-limit jurisdiction over bluefin tuna, and then raised the amount of fish which its own fishermen could catch above those levels which are recommended by ICCAT, I think every other nation which belongs to ICCAT, and those which don't, are going to want to take those giant fish with the object of marketing them in Japan. And I think that is going to wipe out the bluefin tuna stock. I see this simply as that. As the tuna passes every country, from Venezuela on to the coast of Mexico, past Cuba, along the Bahamas—all of these people are going to be fishing hard for the dollars that everybody wants by selling this fish to Japan.

And I don't see much hope for the fish if this happens. The fish were in trouble before; they can be again if there is overfishing.

Mr. ANDERSON. You heard earlier a suggestion made by the chairman to perhaps put an observer on each of the Japanese fishing vessels. What would your reaction be to that?

Mr. MACNOW. I think the Japanese captains would agree to that.

Mr. ANDERSON. There was another suggestion, I believe, about voluntary refraining from fishing in the Gulf of Mexico during this spawning season. There seems to be some feeling that this is something that should be done on a voluntary basis.

Mr. MACNOW. On a scientific basis, it really makes no difference at all whether you take the fish before it spawns or after it spawns. If you take it before it spawns, then you can't take it before it spawns some place else out in the Atlantic; that fish is not available for spawning. If you take it when it spawns—well, they don't take it when it spawns. If you take it after it spawns, that fish is not available to spawn next year.

Scientists really feel that there is no difference when the fish is taken. Once the fish is taken, it's removed from the fishery. And when you are dealing with fish like giant tuna, where each fish releases millions of eggs, generally the yields from these millions of eggs of even from a few fish are—have a better chance of survival perhaps, because fish eat other fish, tunas eat other tunas—the big bluefins eat the little bluefins when they are in the baby form. And if there is too big a population of spawners, they are going to eat a lot of the eggs and a lot of the small fish. Too small a population of spawners may be trouble getting enough eggs out. There is a middle range there in spawning fish which would produce the optimum number of eggs and the optimum number of live fish that would continue to grow and move through the fishery from year to year.

The Japanese, as I told you, said there were over 150,000 spawning fish. Of these fish 8,000—I'm sorry, 150,000 giant bluefin, not spawning giants. A total of 8,000 fish taken in the Gulf of Mexico is not a significant percentage of that stock, and does not seem that it will have any effect on the rebuilding of the stock, considering the fact that there are so many millions of eggs that come from each fish.

Mr. ANDERSON. Mr. Macnow, I want to thank you. Unless you have something further to say, I want to express our appreciation for your appearance here.

Mr. MACNOW. Thank you for allowing me to come here to testify to you.

Mr. ANDERSON. Thank you. The hearing, then, is completed at this time.

[The committee adjourned at 6:51 p.m.]

